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CATALOGUE OF A SECOND THOUSAND OF NEW NEBULÆ AND CLUSTERS OF STARS; WITH A FEW INTRODUCTORY REMARKS ON THE CONSTRUCTION OF THE HEAVENS.

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CATALOGUE, &c.

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BY the continuation of a review of the heavens with my twenty-feet reflector, I am now furniſhed with a ſecond thouſand of new Nebulæ.

Theſe curious objects, not only on account of their number, but alſo in conſideration of their great conſequence, as being no leſs than whole ſidereal ſyſtems, we may hope, will in future engage the attention of Aſtronomers. With a view to induce them to undertake the neceſſary obſervations, I offer them the following catalogue, which, like my former one, of which it is a continuation, contains a ſhort deſcription of each nebula or cluſter of ſtars, as well as its ſituation with reſpect to ſome known object.

The form of this work, it will be ſeen, is exactly that of the former part, the claſſes and numbers being continued, and the ſame letters uſed to expreſs, in the ſhorteſt way, as many eſſential features of the objects as could poſſibly be crowded into ſo ſmall a compaſs as that to which I thought it expedient to limit myſelf.

The method I have taken of *analyzing* the heavens, if I may ſo expreſs myſelf, is perhaps the only one by which we can arrive at a knowledge of their conſtruction. In the proſecution of ſo extenſive an undertaking, it may well be ſuppoſed that many things muſt have been ſuggeſted, by the great variety in the order, the ſize, and the compreſſion of the ſtars, as they preſented themſelves to my view, which it will not be improper to communicate.

To begin our inveſtigation according to ſome order, let us depart from the objects immediately around us to the moſt remote that our teleſcopes, of the greateſt *power to penetrate into ſpace*, can reach. We ſhall touch but ſlightly on things that have already been remarked.

From the earth, conſidered as a planet, and the moon as its ſatellite, we paſs through the region of the reſt of the planets, and their ſatellites. The ſimilarity between all theſe bodies is ſufficiently ſtriking to allow us to comprehend them under one general definition, of bodies not luminous in themſelves, revolving round the ſun. The great diminution of light, when reflected from ſuch bodies, eſpecially when they are alſo at a great diſtance from the light which illuminates them, precludes all poſſibility of following them a great way into ſpace. But if we did not know that light diminiſhes as the ſquares of the diſtances encreaſe, and that moreover in every reflection a very conſiderable part is intirely loſt, the motion of comets, whereby the ſpace through which they run is meaſured out to us, while on their return from the ſun we ſee them gradually diſappear as they advance towards their aphelia, would be ſufficient to convince us that bodies ſhining only with borrowed light can never be ſeen at any very great diſtance. This conſideration brings us back to the ſun, as a refulgent fountain of light, whilſt it eſtabliſhes at the ſame time beyond a doubt that every ſtar muſt likewiſe be a ſun, ſhining by its own native brightneſs. Here then we come to the more capital parts of the great conſtruction.

Theſe ſuns, every one of which is probably of as much conſequence to a ſyſtem of planets, ſatellites, and comets, as our own ſun, are now to be conſidered, in their turn, as the minute parts of a proportionally greater whole. I need not repeat that by my analyſis it appears, that the heavens conſiſt of regions where ſuns are gathered into ſeparate ſyſtems, and that the catalogues I have given comprehend a liſt of ſuch ſyſtems; but may we not hope that our knowledge will not ſtop ſhort at the bare enumeration of phænomena capable of giving us ſo much inſtruction? Why ſhould we be leſs inquiſitive than the natural philoſopher, who ſometimes, even from an inconſiderable number of ſpecimens of a plant, or an animal, is enabled to preſent us with the hiſtory of its riſe, progreſs, and decay? Let us then compare together, and claſs ſome of theſe numerous ſidereal groups, that we may trace the operations of natural cauſes as far as we can perceive their agency. The moſt ſimple form, in which we can view a ſidereal ſyſtem, is that of being globular. This alſo, very favourably to our deſign, is that which has preſented itſelf moſt frequently, and of which I have given the greateſt collection.

But, firſt of all, it will be neceſſary to explain what is our idea of a cluſter of ſtars, and by what means we have obtained it. For an inſtance, I ſhall take the phænomenon which preſents itſelf in many cluſters: It is that of a number of lucid ſpots, of equal luſtre, ſcattered over a circular ſpace, in ſuch a manner as to appear gradually more compreſſed towards the middle; and which compreſſion, in the cluſters to which I allude, is generally carried ſo far, as, by imperceptible degrees, to end in a luminous center, of a reſolvable blaze of light. To ſolve this appearance, it may be conjectured, that ſtars of any given, very unequal magnitudes, may eaſily be ſo arranged, in ſcattered, much extended, irregular rows, as to produce the above deſcribed picture; or, that ſtars, ſcattered about almoſt promiſcuouſly within the fruſtum of a given cone, may be aſſigned of ſuch properly diverſified magnitudes as alſo to form the ſame picture. But who, that is acquainted with the doctrine of chances, can ſeriouſly maintain ſuch improbable conjectures? To conſider this only in a very coarſe way, let us ſuppoſe a cluſter to conſiſt of 5000 ſtars, and that each of them may be put into one of 5000 given places, and have one of 5000 aſſigned magnitudes. Then, without extending our calculation any further, we have five and twenty millions of chances, out of which only one will anſwer the above improbable conjecture, while all the reſt are againſt it. When we now remark that this relates only to the given places within the fruſtum of a ſuppoſed cone, whereas theſe ſtars might have been ſcattered all over the viſible ſpace of the heavens; that they might have been ſcattered, even within the ſuppoſed cone, in a million of places different from the aſſumed ones, the chance of this apparent cluſter's not being a real one, will be rendered ſo highly improbable that it ought to be intirely rejected.

Mr. Michell computes, with reſpect to the ſix brighteſt ſtars of the Pleiades only, that the odds are near 500000 to 1 that no ſix ſtars, out of the number of thoſe which are equal in ſplendour to the fainteſt of them, ſcattered at random in the whole heavens, would be within ſo ſmall a diſtance from each other as the Pleiades are *.

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* Phil. Tranſ. vol. LVII, p. 246.

Taking it then for granted that the ſtars which appear to be gathered together in a group are in reality thus accumulated, I proceed to prove alſo that they are nearly of an equal magnitude.

The cluſter itſelf, on account of the ſmall angle it ſubtends to the eye, we muſt ſuppoſe to be very far removed from us. For, were the ſtars which compoſe it at the ſame diſtance from one another as Sirius is from the ſun; and ſuppoſing the cluſter to be ſeen under an angle of 10 minutes, and to contain 50 ſtars in one of its diameters, we ſhould have the mean diſtance of ſuch ſtars twelve ſeconds; and therefore the diſtance of the cluſter from us about ſeventeen thouſand times greater than the diſtance of Sirius. Now, ſince the apparent magnitude of theſe ſtars is equal, and their diſtance from us is alſo equal,—becauſe we may ſafely neglect the diameter of the cluſter, which, if the center be ſeventeen thouſand times the diſtance of Sirius from us, will give us ſeventeen thouſand and twenty-five for the fartheſt, and ſeventeen thouſand wanting twenty-five for the neareſt ſtar of the cluſter;—it follows that we muſt either give up the idea of a cluſter, and recur to the above refuted ſuppoſition, or admit the equality of the ſtars that compoſe theſe cluſters. It is to be remarked that we do not mean intirely to exclude all variety of ſize; for the very great diſtance, and the conſequent ſmallneſs of the component cluſtering ſtars, will not permit us to be extremely preciſe in the eſtimation of their magnitudes; though we have certainly ſeen enough of them to know that they are contained within pretty narrow limits; and do not, perhaps, exceed each other in magnitude more than in ſome ſuch proportion as one full-grown plant of a certain ſpecies may exceed another full-grown plant of the ſame ſpecies.

If we have drawn proper concluſions relating to the ſize of ſtars, we may with ſtill greater ſafety ſpeak of their relative ſituations, and affirm that in the ſame diſtances from the center an equal ſcattering takes place. If this were not the caſe, the appearance of a cluſter could not be uniformly encreaſing in brightneſs towards the middle, but would appear nebulous in thoſe parts which were more crowded with ſtars; but, as far as we can diſtinguiſh, in the cluſters of which we ſpeak, every concentric circle maintains an equal degree of compreſſion, as long as the ſtars are viſible; and when they become too crowded to be diſtinguiſhed, an equal brightneſs takes place, at equal diſtances from the center, which is the moſt luminous part.

The next ſtep in my argument will be to ſhew that theſe cluſters are of a globular form. This again we reſt on the ſound doctrine of chances. Here, by way of ſtrength to our argument, we may be allowed to take in all round nebulæ, though the reaſons we have for believing that they conſiſt of ſtars have not as yet been entered into. For, what I have to ſay concerning their ſpherical figure will equally hold good whether they be groups of ſtars or not. In my catalogues we have, I ſuppoſe, not leſs than one thouſand of theſe round objects. Now, whatever may be the ſhape of a group of ſtars, or of a Nebula, which we would introduce inſtead of the ſpherical one, ſuch as a cone, an ellipſis, a ſpheroid, a circle or a cylinder, it will be evident that out of a thouſand ſituations, which the axes of ſuch forms may have, there is but one that can anſwer the phænomenon for which we want to account; and that is, when thoſe axes are exactly in a line drawn from the object to the place of the obſerver. Here again we have a million of chances of which all but one are againſt any other hypotheſis than that which we maintain, and which, for this reaſon, ought to be admitted.

The laſt thing to be inferred from the above related appearances is, that theſe cluſters of ſtars are more condenſed towards the center than at the ſurface. If there ſhould be a group of ſtars in a ſpherical form, conſiſting of ſuch as were equally ſcattered over all the aſſigned ſpace, it would not appear to be very gradually more compreſſed and brighter in the middle; much leſs would it ſeem to have a bright nucleus in the center. A ſpherical cluſter of an equal compreſſion within,—for that ſuch there are will be ſeen hereafter,—may be diſtinguiſhed by the degrees of brightneſs which take place in going from the center to the circumference. Thus, when a is the brightneſs in the center, it will be $\sqrt{a^2 - x^2}$ at any other diſtance x from the center. Or, putting $a = 1$, and $x =$ any decimal fraction; then, in a table of natural ſines, where x is the ſine, the brightneſs at x will be expreſſed by the coſine. Now, as a gradual encreaſe of brightneſs does not agree with the degrees calculated from a ſuppoſition of an equal ſcattering, and as the cluſter has been proved to be ſpherical, it muſt needs be admitted that there is indeed a greater accumulation towards the center. And thus, from the above-mentioned appearances, we come to know that there are globular cluſters of ſtars nearly equal in ſize, which are ſcattered evenly at equal diſtances from the middle, but with an encreaſing accumulation towards the center.

We may now venture to raiſe a ſuperſtructure upon the arguments that have been drawn from the appearance of cluſters of ſtars and nebulæ of the form I have been examining, which is that of which I have made mention in my "*Theoretical*

"*cal view—Formation of Nebulæ—Form I**." It is to be remarked that when I wrote the paragraph I refer to, I delineated nature as well as I do now; but, as I there gave only a general ſketch, without referring to particular caſes, what I then delivered may have been looked upon as little better than hypothetical reaſoning, whereas in the preſent inſtance this objection is intirely removed, ſince actual and particular facts are brought to vouch for the truth of every inference.

Having then eſtabliſhed that the cluſters of ſtars of the 1ſt Form, and round nebulæ, are of a ſpherical figure, I think myſelf plainly authorized to conclude that they are thus formed by the action of central powers. To manifeſt the validity of this inference, the figure of the earth may be given as an inſtance; whoſe rotundity, ſetting aſide ſmall deviations, the cauſes of which are well known, is without heſitation allowed to be a phænomenon deciſively eſtabliſhing a centripetal force. Nor do we ſtand in need of the revolving ſatellites of Jupiter, Saturn, and the Georgium Sidus, to aſſure us that the ſame powers are likewiſe lodged in the maſſes of theſe planets. Their globular figure alone muſt be admitted as a ſufficient argument to render this point uncontrovertible. We alſo apply this inference with equal propriety to the body of the ſun, as well as to that of Mercury, Venus, Mars, and the Moon; as owing their ſpherical ſhape to the ſame cauſe. And how can we avoid inferring, that the conſtruction of the cluſters of ſtars, and nebulæ likewiſe, of which we have been ſpeaking, is as evidently owing to central powers?

Beſides, the ſtep that I here make in my inference is in fact a very eaſy one, and ſuch as ought freely to be granted. Have I not already ſhewn that theſe cluſters cannot have come to their preſent formation by any random ſcattering of ſtars? The doctrine of chance, by expoſing the very great odds againſt ſuch hypotheſes, may be ſaid to demonſtrate that the ſtars are thus aſſembled by ſome power or other. Then, what do I attempt more than merely to lead the mind to the conditions under which this power is ſeen to act?

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* Phil. Tranſ. vol. LXXV, p. 214.

In a caſe of ſuch conſequence I may be permitted to be a little more diffuſe, and draw additional arguments from the internal conſtruction of ſpherical cluſters and nebulæ. If we find that there is not only a general form, which, as has been proved, is a ſufficient manifeſtation of a centripetal force, what ſhall we ſay when the accumulated condenſation, which every where follows a direction towards a center, is even viſible to the very eye? Were we not already acquainted with attraction, this gradual condenſation would point out a central power, by the remarkable diſpoſition of the ſtars tending towards a center. In conſequence of this viſible accumulation, whether it may be owing to attraction only, or whether other powers may aſſiſt in the formation, we ought not heſitate to aſcribe the effect to ſuch as are *central*; no phænomena being more deciſive in that particular, than thoſe of which I am treating.

I am fully aware of the conſequences I ſhall draw upon myſelf in but mentioning other powers that might contribute to the formation of cluſters. A mere hint of this kind, it will be expected, ought not to be given without ſufficient foundation; but let it ſuffice at preſent to remark that my arguments cannot be affected by my terms: whether I am right to uſe the plural number,—central powers,—or whether I ought only to ſay,—the known central force of gravity,—my concluſions will be equally valid. I will however add, that the idea of other central powers being concerned in the conſtruction of the ſidereal heavens, is not one that has only lately occurred to me. Long ago I have entertained a certain theory of diverſified central powers of attractions and repulſions; an expoſition of which I have even delivered in the years 1780, and 1781, to the Philoſophical Society then exiſting at Bath, in ſeveral mathematical papers upon that ſubject. I ſhall, however, ſet aſide an explanation of this theory, which would not only exceed the intended limits of this paper, but is moreover not required for what remains at preſent to be added, and therefore may be given ſome other time, when I can enter more fully into the ſubject of the interior conſtruction of ſidereal ſyſtems.

To return, then, to the caſe immediately under our preſent conſideration, it will be ſufficient that I have abundantly proved that the formation of round cluſters of ſtars and nebulæ is either owing to central powers, or at leaſt to one ſuch force as refers to a center.

I ſhall now extend the weight of my argument, by taking in likewiſe every cluſter of ſtars or nebula that ſhews a gradual condenſation, or encreaſing brightneſs, towards a center or certain point; whether the outward ſhape of ſuch cluſters or nebulæ be round, extended, or of any other given form. What has been ſaid with regard to the doctrine of chance, will of courſe apply to every cluſter, and more eſpecially to the extended and irregular ſhaped ones, on account of their greater ſize: It is among theſe that we find the largeſt aſſemblages of ſtars, and moſt diffuſive nebuloſities; and therefore the odds againſt ſuch aſſemblages happening without ſome particular power to gather them, encreaſe exceedingly with the number of the ſtars that are taken together. But if the gradual accumulation either of ſtars or encreaſing brightneſs has before been admitted as a direction to the ſeat of power, the ſame effect will equally point out the ſame cauſe in the caſes now under conſideration. There are beſides ſome additional circumſtances in the appearance of extended cluſters and nebulæ, that very much favour the idea of a power lodged in the brighteſt part. Although the form of them be not globular, it is plainly to be ſeen that there is a tendence towards ſphericity, by the ſwell of the dimenſions the nearer we draw towards the moſt luminous place, denoting as it were a courſe, or tide of ſtars, ſetting towards a center. And—if allegoral expreſſions may be allowed—it ſhould ſeem as if the ſtars thus flocking towards the ſeat of power were ſtemmed by the crowd of thoſe already aſſembled, and that while ſome of them are ſucceſsful in forcing their predeceſſors ſideways out of their places, others are themſelves obliged to take up with lateral ſituations, while all of them ſeem equally to ſtrive for a place in the central ſwelling, and generating ſpherical figure.

Since then almoſt all the nebulæ and cluſters of ſtars I have ſeen, the number of which is not leſs than three and twenty hundred, are more condenſed and brighter in the middle; and ſince, from every form, it is now equally apparent that the central accumulation or brightneſs muſt be the reſult of central powers, we may venture to affirm that this theory is no longer an unfounded hypotheſis, but is fully eſtabliſhed on grounds which cannot be overturned.

Let us endeavour to make ſome uſe of this important view of the conſtructing cauſe, which can thus model ſidereal ſyſtems. Perhaps, by placing before us the very extenſive and varied collection of cluſters, and nebulæ furniſhed by my catalogues, we may be able to trace the progreſs of its operation, in the great laboratory of the Univerſe.

If theſe cluſters and nebulæ were all of the ſame ſhape, and had the ſame gradual condenſation, we ſhould make but little progreſs in this inquiry; but, as we find ſo great a variety in their appearances, we ſhall be much ſooner at a loſs how to account for ſuch various phænomena, than be in want of materials upon which to exerciſe our inquiſitive endeavours.

Some of theſe round cluſters conſiſt of ſtars of a certain magnitude, and given degree of compreſſion, while the whole cluſter itſelf takes up a ſpace of perhaps 10 minutes; others appear to be made up of ſtars that are much ſmaller, and much more compreſſed, when at the ſame time the cluſter itſelf ſubtends a much ſmaller angle, ſuch as 5 minutes. This diminution of the apparent ſize, and compreſſion of ſtars, as well as diameter of the cluſter to 4, 3, 2 minutes, may very conſiſtently be aſcribed to the different diſtances of theſe cluſters from the place in which we obſerve them; in all which caſes we may admit a general equality of the ſizes, and compreſſion of the ſtars that compoſe them, to take place. It is alſo highly probable that a continuation of ſuch decreaſing magnitudes, and encreaſing compreſſion, will juſtly account for the appearance of round, eaſily reſolvable, nebulæ; where there is almoſt a certainty of their being cluſters of ſtars. And no Aſtronomer can heſitate to go ſtill farther, and extend his ſurmiſes by imperceptible ſteps to other nebulæ, that ſtill preſerve the ſame characteriſtics, with the only variations of vaniſhing brightneſs, and reduction of ſize.

Other cluſters there are that, when they come to be compared with ſome of the former, ſeem to contain ſtars of an equal magnitude, while their compreſſion appears to be conſiderably different. Here the ſuppoſition of their being at different diſtances will either not explain the apparently greater compreſſion, or, if admitted to do this, will convey to us a very inſtructive conſequence: which is, that the ſtars which are thus ſuppoſed not to be more compreſſed than thoſe in the former cluſter, but only to appear ſo on account of their greater diſtance, muſt needs be proportionally larger, ſince they do not appear of leſs magnitude than the former. As therefore, one or other of theſe hypotheſes muſt be true, it is not all improbable but that, in ſome inſtances, the ſtars may be more compreſſed; and in others, of a greater magnitude. This variety of ſize, in different ſpherical cluſters, I am however inclined to believe, may not go farther than the difference in ſize, found among the individuals belonging to the ſame ſpecies of plants, or animals, in their different ſtates of age, or vegetation, after they are come to a certain degree of growth. A farther inquiry into the circumſtance of the extent, both of condenſation and variety of ſize, that may take place with the ſtars of different cluſters, we ſhall poſtpone till other things have been previouſly diſcuſſed.

Let us then continue to turn our view to the power which is moulding the different aſſortments of ſtars into ſpherical cluſters. Any force, that acts uninterruptedly, muſt produce effects proportional to the time of its action. Now, as it has been ſhewn that the ſpherical figure of a cluſter of ſtars is owing to central powers, it follows that thoſe cluſters which, *ceteris paribus*, are the moſt compleat in this figure, muſt have been the longeſt expoſed to the action of theſe cauſes. This will admit of various points of views. Suppoſe for inſtance that 5000 ſtars had been once in a certain ſcattered ſituation, and that other 5000 equal ſtars had been in the ſame ſituation, then that of the two cluſters which had been longeſt expoſed to the action of the modelling power, we ſuppoſe, would be moſt condenſed, and more advanced to the maturity of its figure. An obvious conſequence that may be drawn from this conſideration is, that we are enabled to judge of the relative age, maturity, or climax of a ſidereal ſyſtem, from the diſpoſition of its component parts; and, making the degrees of brightneſs in nebulæ ſtand for the different accumulation of ſtars in cluſters, the ſame concluſions will extend equally to them all. But we are not to conclude from what has been ſaid that every ſpherical cluſter is of an equal ſtanding in regard to abſolute duration, ſince one that is compoſed of a thouſand ſtars only, muſt certainly arrive to the perfection of its form ſooner than another, which takes in a range of a million. Youth and age are comparative expreſſions; and an oak of a certain age may be called very young, while a cotemporary ſhrub is already on the verge of its decay. The method of judging with ſome aſſurance of the condition of any ſidereal ſyſtem may perhaps not improperly be drawn from the ſtandard laid down page 218; ſo that, for inſtance, a cluſter or nebula which is very gradually more compreſſed and bright towards the middle, may be in the perfection of its growth, when another which approaches to the condition pointed out by a more equal compreſſion, ſuch as the nebulæ I have called *Planetary* ſeem to preſent us with, may be looked upon as very aged, and drawing on towards a period of change, or diſſolution. This has been before ſurmiſed, when, in a former paper, I conſidered the uncommon degree of compreſſion that muſt prevail in a nebula to give it a planetary aſpect; but the argument, which is now drawn from the powers that have collected the formerly ſcattered ſtars to the form we find they have aſſumed, muſt greatly corroborate that ſentiment.

This method of viewing the heavens ſeems to throw them into a new kind of light. They now are ſeen to reſemble a luxuriant garden, which contains the greateſt variety of productions, in different flouriſhing beds; and one advantage we may at leaſt reap from it is, that we can, as it were, extend the range of our experience to an immenſe duration. For, to continue the ſimile I have borrowed from the vegetable kingdom, is it not almoſt the ſame thing, whether we live ſucceſſively to witneſs the germination, blooming, foliage, fecundity, fading, withering, and corruption of a plant, or whether a vaſt number of ſpecimens, ſelected from every ſtage through which the plant paſſes in the courſe of its exiſtence, be brought at once to our view?

WILLIAM HERSCHEL.

Slough near Windſor, May 1, 1789.

Firſt Claſs. Bright nebulæ.

Genl. No.	I.	1785		Stars.			M.	S.		D.M.		Ob	Deſcription.
1028	94	April	28	61	Urſæ	f	0	6	n	2	17	2	cB. pL. E. ſp nf. vgmbM. 3½ l. 2′b.
1031	95		—	—	——	f	35	0	n	2	7	2	cB. cL. E. np ſf. bM. 4′l. 3′b.
1040	96	May	1	14	Canum	f	5	30	n	1	12	2	vB. cL. mE. ſp nf. ſmbM. 6′l. 1′½ b.
1042	97		—	—	——	f	7	58	n	0	47	1	vB. pL. E. nearly mer. gmbM.
1052	98		—	—	——	f	36	50	ſ	0	12	1	cB. pL. R. vgmbM.
1062	99		—	27	(γ) Bootis	p	13	46	ſ	1	46	2	vB. S. R. vſmbM.
1096	100	Sept.	10	41	Ceti	f	13	43	n	0	48	1	cB. pS. R. mbM. See III. 431.
1099	101		—	67	——	p	17	19	n	0	25	2	cB. pL. E. near. mer. mbM. 5′ l.
1106	102		—	—	——	f	21	37	ſ	0	13	2	cB. pL. R. mbM.
1107	103		24	14	Delphini	p	16	10	ſ	0	3	1	vB. L. gmbM. er. beautif. object.
1114	104		28	93	(ψ) Aqua	f	1	8	n	0	42	1	cB. cL. E. near. mer. gmbM. F. rays.
1132	105	Oct.	3	47	Ceti	f	26	24	ſ	0	37	1	cB. pL. iR. mbM.
1133	106		—	89	(π) ——	f	38	10	ſ	1	24	2	cB. cL. iR. bM. 3′ dia.
1150	107		6	20	Eridani	f	4	3	ſ	1	4	2	vB. R. BNM. 1′½ dia.
1155	108		8	111	(ξ) Piſc^m	p	34	22	ſ	0	1	1	cB. vL. iR. p. vBſt.
1173	109		26	12	Eridani	p	7	17	n	2	54	3	cB. pS. lE. mer. mbM. r. 1′½ l.

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Gen.e No.	I.	1785		Stars.		M.	S.		D.M.		Ob	Deſcription.	
1184	110	Nov.	27	9 Ceti	p	44	0	ſ	0	47	2	cB. cL. lE. gmbM. iF.	
1185	111		—	——	p	43	3	ſ	0	6	2	cB. cL. iR. gmbM.	
1211	112		29	5 (γ) Arietis	f	5	48	ſ	0	17	1	vB. L. R. mbM. not er. 4′ dia.	
1221	113	Dec.	7	66 (4th σ) Can	f	18	22	n	1	34	2	cB. cL. lE. iF. mb foll. ſide.	
1223	114		—	18 Leo. min.	p	13	39	ſ	0	35	1	cB. cL. iF. mbM.	
1225	115		—	— — —	p	5	47	n	1	10	2	cB. pL. lE. iF. mbM.	
1228	116 }		—	37 — —	f	11	5	n	1	1	1	{ Two; the 1ſt, cB. cL. iE; the 2d,	
1229	117 }											pB. pL. iE. Diſt. 1′ at the vertex.	
1232	118		—	46 Urſæ	p	3	41	ſ	1	32	1	cB. cL. iR. mbM.	
1251	119		28	31 (1ſt d) Vir	p	6	0	n	0	55	1	vB. pS.	
1268	120		31	30 (η) Crateri	p	9	0	n	0	17	1	cB. L. iR. bM. 5′ l. 4′ b.	
		1786											
1284	121	Jan.	1	13 (η) Virgin	p	18	15	ſ	0	19	1	vB. cL. lE. mbM. 3′ l. 2′½ b. bet. 2 pBſt.	
1310	122	Feb.	1	57 (μ) Eridani	p	4	0	n	0	22	1	cB. vL. iR. bM. er. 5 or 6′ dia.	
1325	123		2	60 (σ) Virg.	p	52	27	ſ	0	30	2	cB. S.	
1327	124		—	— — —	p	39	57	ſ	0	3	2	cB. cL. R.	
1328	125		—	— — —	p	39	12	ſ	1	6	2	cB. cL. E. mbM.	
1347	126		24	108 ——	p	0	35	n	1	15	1	eB. mE. par. BN. 8 or 9′ l.	
1349	127		—	110 ——	p	1	47	ſ	0	23	1	cB. pS. mbM.	
1354	128		—	— ——	f	3	37	ſ	0	30	1	vB. pL. bM.	
1363	129	March	3	26 (χ) ——	f	9	46	ſ	0	41	1	v brilliant. iR. vgmbM.	
1369	130		—	— — —	f	26	35	ſ	0	3	2	vB. lE. mer. BN. and F. br. 2′ l.	
1372	131		4	14 (ι) Crate.	f	0	29	n	1	3	1	cB. E. gbM. 5′ l. 4′ b.	
1379	132		19	26 Hydræ	f	1	44	n	0	4	2	cB. pL. lE. vgbM. 1′½ diam.	
1391	133		25	49 (g) Virgin.	p	16	4	n	0	18	1	cB. vS. BN.	
1394	134		—	— — —	p	13	27	n	0	13	1	cB. 7 or 8′ l. 3′ b.	
1410	135 }		27	68 (ι) ——	p	32	2	n	0	11	2	{ Two; both cB. cS. R. mbM.	
1411	136 }											Diſt. 1′ near. mer. chev. mixed.	
1418	137		28	4~~1~~ Lyncis.	f	3	13	n	0	8	1	vB. R. vſmbM. chev. 3′ dia.	41 Lyncis
1422	138		—	*1102 (ε) Hy	f	33	45	n	1	27	1	cB. R. pſmbM. * See note.	
1430	139	April	17	11 (s) Virgin.	f	12	1	ſ	1	21	2	eB. vBN. r. 6 or 7′ dia.	
1432	140		—	— — —	f	39	55	ſ	0	31	2	cB. pL. mbM.	
1434	141		—	— — —	f	45	50	ſ	1	32	1	vB. cL. E. np ſf.	
1443	142		30	37 ——	p	6	35	n	0	0	1	cB. pL. iR. gmbM.	
1446	143		—	43 (δ) Virgin	f	4	55	ſ	~~2~~	~~7~~	1	cB. np. pBſt. and cloſe to it.	ſ 0° 54′
1448	144		—	109 ——	p	25	58	n	~~0~~	~~54~~	1	cB. cL. R. gmbM.	n 2° 7′
1450	145 }		—	— ——	p	25	14	n	1	27	1	{ Two; the p. pB. pL. E. Diſt. 3 or 4′	
1451	146 }											ſp nf. The f cB. R. pL. Place of 2d.	
1457	147		—	43 Ophiuchi	p	8	54	ſ	1	17	1	vB. R. gmbM. 2′½ dia.	
1460	148	May	1	24 (α) Serpen	p	22	26	ſ	1	16	1	cB. cL. iR. bM.	
1469	149		28	40 (ξ) Ophiu	f	0	14	n	1	32	1	cB. pS. lE. er.	
1470	150		—	— — —	f	27	53	n	0	36	1	cB. R. vgmbM. about 1′½ dia.	
1478	151	Sept.	4	71 (ε) Piſcium	f	21	41	n	1	41	1	cB. cL. R. C. vgmbM. N.	
1482	152		—	24 (ξ) Arietis	p	16	23	n	0	20	2	vB. vS. R. or lE. vBN. 1′ ſf. cſt	

Gen.l No.	I.	1786	Stars.		M.	S.		D.M.		Ob	Deſcription.
1488	153	Sept. 20	59 (2d ν) Ceti	p	23	16	ſ	0	6	1	cB. vL. E. ſp nf. above 15′ l.
1501	154	21	14 Triang.	f	1	23	n	0	59	2	cB pL. E. np ſf. vgmbM. 3′ l. 2′ b. p
1508	155	30	32 Eridani	f	7	49	ſ	1	1	2	cB. S. gmbM. p
1530	156	Oct. 18	12 (q) Perſei	p	1	41	ſ	1	10	2	cB. mE. 12° ſp nf. vBN. near 10′ l.
1546	157	26	90 (υ) Piſcium	f	28	9	n	0	13	1	cB. cL. E. par. mbM. 7′ l. 3′ b.
1557	158	Nov. 26	48 (ν) Eridani	p	4	32	ſ	1	46	2	cB. pL. iR. vgmbM.
1565	159	Dec. 11	20 (π) Caſſiop	f	8	30	n	0	33	3	vB. R. vgbM. 1′½ dia.
1591	160	29	29 (γ) Virgin	p	6	17	ſ	2	19	2	vB. cL. E. ſp nf. vgBN. F. bran.
		1787									
1600	161	Jan. 14	6 Comæ	f	12	58	ſ	0	55	1	vB. pL. iR.
1607	162	—	29 ——	f	10	35	n	0	2	1	vB. E. ſp nf. Sſt in it ½′ p. N.
1618	163	Feb. 22	20 Sextantis	p	8	29	ſ	0	22	1	cB. cL. mE. 45° ſp nf. N. 2′ l. F. br. 5′ l.
1633	164	Mar. 17	38 Leo. min.	p	2	54	ſ	0	36	3	cB. E. 30° np ſf. mbM. er. 4′ l. 2′ b.
1638	165	—	6 Canum	p	15	42	n	0	25	2	vB. BN. not M. or 2 joined the n. N.
1641	166	—	— ——	p	1	20	n	0	23	2	vB. S. R. mbM.
1656	167	18	10 (n) Urſæ	f	13	43	ſ	1	40	1	cB. R. BN. 1′½ dia.
1662	168	—	34 (μ) ——	p	4	9	ſ	0	6	3	cB. R. vgbM. 8′ dia. cſt. in it, unconnected.
1665	169	—	6 Canum	p	16	16	n	0	53	1	cB. cL.
1667	170	—	20 ——	f	28	12	n	1	6	2	cB. E. near par. SNM. 2′ l.
1670	171	—	53 (2d ν) Boot	p	49	57	n	1	10	2	cB. S. R. r. mbM.
1682	172	19	31 Leo. min.	f	25	2	ſ	0	3	1	cB. E. ſp nf. few ſt. in p. 1 in n. unconnected.
1683	173	—	— — ——	f	86	19	n	0	23	1	vB. R. vgNM. 2′½ dia.
1696	174	20	53 (ξ) Urſæ	f	46	14	n	0	24	1	cB. E. 5′ l. 1′½ b.
1697	175	—	13 Canum	p	46	3	n	2	28	1	vB. S R. mbM.
1701 1702	176 177	—	— ——	p	16	33	n	1	26	1	Two. The f. cB. E. mbM. The n. pB. E. ſp nf. Both join and form the letter S.
1708 1709	178 179	April 9	8 ——	f	7	36	ſ	0	12	1	Two. The n. vB. vmbM. The ſ. pB. Their nebul. run together.
1722	180	—	20 ——	f	29	9	n	3	15	1	cB. mE. 60° np ſf. vſBM.
1726	181	—	— ——	f	40	13	n	1	11	1	cB. cL. mbM.
1745	182	11	1 Serpentis	p	17	22	ſ	0	2	2	cB. pL. iR. mbM.
1747	183	—	— ——	p	11	19	n	0	1	2	cB. pL. iR. or lE.
1761	184	May 7	8 Libræ	p	8	21	ſ	1	15	1	cB. pL. E. ſp nf. mbM.
1763	185	11	19 (λ) Bootis	f	11	6	n	0	1	2	c or pB S. R. pſmbM.
1765	186	12	— — ——	p	47	14	n	1	20	2	cB. pL. R or lE. vgbM. 3′ np. the 51ſt of the *Conn. des Temps.*
1768	187	—	— — ——	p	20	15	n	1	14	1	cB E. 30 ſp nf. BN. vgF. branches.
1770	188	—	38 (2d b) ——	p	13	24	n	2	44	2	cB. lE. par. mbM. F. bran. 1′½ l.
1782	189	15	24 (g) ——	f	3	57	ſ	0	23	1	cB. cL. E. ſp nf. broad.

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Gen.l No.	I.	1787	Stars.		M.	S.		D.M.		Ob	Deſcription.
1790	190	May 16	*Canum 6m.	f	11	32	ſ	1	11	1	Two. The ſ. cB. cL. The n. pB. S. diſt. 1′½. * See note.
1791	191										
1812	192	Oct. 14	3 Lacertæ	p	80	46	n	2	32	3	cB. iF. 3′ l. 2′½ b. Nebuloſity.
1837	193	Nov. 12	54 (φ) Andro	p	1	26	n	0	54	1	Two cloſe together. Both vB. diſt. 2′. ſp nf. One is 76 of the *Conn.*
		1788									
1843	194	Jan. 14	56 Urſæ	f	3	19	n	0	5	2	vB. cL. mE. mer. BN. 6′l. 2′b. chev.
1844	195	—	67 ——	f	4	49	n	0	2	2	E. vBN. and F. branches.
1846	196	—	— ——	f	7	17	n	0	38	2	cB. cL. iF. vgbM. ſf. ſt.
1848	197	—	8 Canum	p	3	32	n	0	19	1	Two. The ſ. vB. vL. iE. The n. B. pS. iF. diſt. 1′½.
1849	198										
1860	199	15	15 Leo. min.	f	32	1	ſ	0	24	2	cB. mE. ſp nf. vgbM. 5′l. 2 or 3′b.
1876	200	Feb. 5	59 (2d σ) Can	p	4	29	n	0	29	1	v brilliant. mE. ſp nf. 8′l. 3′b. beauti.
1885	201	—	63 (χ) Urſæ	f	0	5	ſ	0	17	2	cB. mE. ſp nf. near. mer. 5′l. 1′b.
1886	202	—	— — ——	f	0	47	n	0	4	2	cB S. lE.
1889	203	6	59 ——	f	[illegible]	42	n	0	31	1	cB. cL. R. pBNM. 14′ 7′ 47″
1900	204	March 9	9 (ι) ——	p	16	27	n	2	7	1	cB. vS. lE. m.
1902	205	—	— — ——	f	22	18	n	3	1	1	vB. lbM. chev. bran. m. neb. 6′l. 4′b.
1912	206	—	3 Canum	p	14	39	n	1	35	3	cB. E. 45° np ſf. 6′ l. 4′b. almoſt equally B.
1914	207	—	— ——	p	14	0	ſ	1	32	3	cB. mE. 70° ſp nf. 6 or 7′l. 2′b.
1915	208	—	— ——	p	9	9	n	1	32	3	cB. mE. ſp nf. SBNM. 5′l. 1′b.
1917	209	—	— ——	p	3	33	ſ	1	6	2	cB. cL. E. mbM.
1928	210	April 1	60 Urſæ	f	46	0	n	0	9	2	vB. S. lE. near. par. BN. eF. bran.
1929	211	—	11 Canum	f	5	47	ſ	1	58	3	cB. S. R. bM. f. vSſt.
1937	212	10	60 Urſæ	f	50	50	ſ	1	58	1	cB pL. E.
1942	213	27	19 (λ) Bootis	p	110	25	ſ	1	48	1	v brilliant. cL. E. ſp nf. difficulty r. has 3 or 4 BN.
1955	214	May 1	17 (κ) ——	p	8	26	n	1	56	1	cB. cL. n. ends abruptly. ſ. vg.
1959	215	5	Neb. II. 757.	p	3	27	ſ	1	14	1	vB. cL. E. f. 2 ſt.

Second claſs. Faint nebulæ.

Gen.l No	II.	1785	Stars.		M.	S.		D.M.		Ob	Deſcription.
1005	403	April 26	1 Comæ	p	8	50	ſ	1	21	3	F. cL. iF. lbM.
1015	404	27	5 ——	p	11	40	ſ	0	29	1	pB. pL. R. C. mbM.
1023	405	—	— ——	p	1	0	ſ	0	24	2	pB. pL. iF. lE. bM. p. pcſt.
1025	406	—	20 ——	p	6	8	ſ	1	27	1	pF. pL. mbM. S neb. joined to it. or lb. in the n.
1026	407	—	— ——	f	6	44	ſ	1	35	1	pB. pS. lE.
1029	408	28	61 Urſæ	f	7	54	n	0	46	2	F. S. R. gbM. near ½′ dia.
1033	409	May 1	— ——	f	33	54	n	2	25	2	pB. pL. vgbM. r.
1034	410	—	14 Canum	p	32	8	ſ	0	14	2	pB. cL. R. ſmbM. r.

Gen^{e}. No.	II.	1785		Stars.		M.	S.		D.M.		Ob	Deſcription.
1035	411	May	1	14 Canum	p	24	25	ſ	0	43	2	pB. pL. R. lbM. 2′ np. pBſt.
1036	412		—	— ——	p	17	8	ſ	0	28	2	F. S. lE. glbM. er.
1038	413		—	— ——	p	0	50	ſ	0	36	2	pB. S. R. bM. and vſF. on the edges.
1041	414		—	— ——	f	5	58	n	0	27	1	F. S. lE.
1053	415		—	— ——	f	48	34	n	0	15	1	F. S iF.
1056	416		—	— ——	f	58	10	ſ	1	8	2	pB. pL. iE. mbM.
1057	417		—	— ——	f	58	18	ſ	0	47	1	pB. pL. iE. bM.
1060	418		—	51 (μ) Bootis	p	69	38	ſ	1	48	1	pB. iR. mbM.
1061	419		—	— — ——	p	68	31	ſ	0	37	1	F. pL.
1067	420		—	— — ——	p	61	32	ſ	2	17	1	pB. vS. R. vgmbM.
1070	421		—	— — ——	p	55	14	ſ	1	53	1	F. pL. iF.
1071	422		—	— — ——	p	52	36	ſ	0	52	1	F. cL. iF. unequally B.
1073	423		—	— — ——	p	47	57	ſ	0	37	1	pF. pS. iF. bM.
1076	424		2	49 (δ) ——	p	83	12	n	0	31	1	F. pL. lbM.
1079	425		5	34 (ω) Serpen	p	4	0	n	0	15	3	F. cS. iR. ſtellar.
1082 1083	426 427	Aug.	12	1 Aquarii	f.	7	50	ſ	0	12	1	Two. The p. F. S. iR. mbM. The f. vF. vS. lbM. 3 or 4′ diſt. Place of 1ſt.
1084	428		30	35 Pegaſi	f	6	22	n	0	47	2	pB. S. iR. lbM. r.
1085 1086	429 430		—	6 (γ) Piſcium	p	2	16	n	1	14	1	Two. The f. pB. mE. par. mbM. 4′ l. 1′ b. The p. vF. cS 3 or 4′ diſt. and p.
1089	431	Sept.	10	92 (χ) Aqua	f	2	0	n	0	9	2	pB. S. lE. par. vgF. NM. 1′ l.
1090	432		—	— — ——	f	22	5	n	1	9	4	pB. cL. E. 75° ſp nf. 3′ l.
1094	433		—	41 Ceti	p	18	0	ſ	0	4	1	pB. pL. bM. i. parallelogram. mer.
1095	434		—	— ——	p	14	23	n	1	18	1	F. S. iF. bM. r.
1100	435		—	67 ——	p	15	52	ſ	0	27	1	F. S. iR. bM.
1102	436		—	— ——	f	1	45	ſ	0	14	1	F. pS. lE. ſ. 2 or 3 uneq. ſt.
1103	437		—	— ——	f	2	7	ſ	0	24	1	F. pS. lE.
1104	438		—	— ——	f	4	33	n	0	54	2	pB. vL. iF. mbM. r.
1108	439		26	59 (ρ) Pegaſi	f	8	34	ſ	0	30	1	pB. pS. mbM.
1109	440		—	— — ——	f	9	1	ſ	0	30	1	pB. pS. bM.
1111	441		—	— — ——	f	10	1	n	0	10	1	F. S.
1116	442	Oct.	1	62 (η) Aqua	f	9	4	ſ	0	5	3	F. S. r. lbM. or f. M.
1117	443		—	— — ——	f	15	19	ſ	1	29	2	F. S. iR. lbM. 1′½ f. S. ſt.
1118	444		—	20 Ceti	p	10	20	ſ	0	24	1	F. pL. lbM.
1119	445		—	— ——	p	6	50	ſ	0	35	1	F. iF. er. 1′ b.
1120	446		—	— ——	p	2	16	ſ	0	45	2	pB. S. R. mbM. m.
1122	447		—	34 ——	f	1	3	n	2	0	2	F. S. Two more near it. See III. 592. 593.
1124 1125	448 449		—	43 ——	f	3	28	ſ	0	53	1	Two. Both ſtellar. within 1′ diſt. Nebuloſities run together.
1129 1130	450 451		3	71 (1ſt τ) Aqu	f	11	10	n	0	45	2	Two Both F. S. lE. different directions. er. 2 or 3′ from each other.
1131	452		—	18 Ceti	p	5	33	ſ	0	59	1	pB. pS. mbM. r. ſt. 1′½ diſt.
1134	453		5	63 (κ) Aqua	f	13	50	ſ	1	19	1	F. pL. E. par. r.

Gen.l No	II.	1785		Stars.		M.	S.		D.	M.	Ob	Deſcription.
1135	454	Oct.	5	90 (φ) Aqua	f	3	11	n	1	17	1	F. S. almoſt ſtellar.
1140	455		—	17 Eridani	f	11	19	n	0	26	2	Two. The p. pB. cL. E. lbM.
1141	456					11	46		0	25		The f. eF. vS. E.
1142	457		—	61 (ω) ——	p	4	31	ſ	0	2	2	F. cL. lbM.
1151	458		6	20 ——	f	8	52	ſ	0	46	1	pB. R. bM.
1152	459		—	— ——	f	9	14	ſ	1	4	1	F. R. lbM.
1153	460		—	— ——	f	12	7	n	1	6	1	pB. S. lE. mbM. N.
1156	461		8	111 (ξ) Piſciu	p	28	48	ſ	1	32	3	F. pL. iR. vgbM. 1′½ dia.
1157	462		—	— — ——	p	27	52	ſ	1	32	2	pB. R. vgbM. 1′¼ dia.
1158	463		—	— — ——	p	26	40	ſ	1	15	3	F. S. ilE. par. mbM.
1159	464		—	44 Eridani	p	9	2	n	0	0	1	F. vS. r.
1163	465		9	82 (δ) Ceti	f	7	12	ſ	0	34	3	F. pL. iR. lbM.
1164	466		—	— — ——	f	7	4	ſ	0	49	3	pB. cL. iR. mbM.
1165	467		25	7 (b) Piſcium	p	4	23	n	1	22	1	pB. pL. iF.
1166	468		—	26 ——	f	0	11	ſ	1	10	1	F. pL. iF. r.
1170	469		26	49 Aquarii	f	5	14	ſ	0	4	1	F. pS. lE. er. ſome of the ſt. viſible.
1180	470	Nov.	22	67 Ceti	f	37	51	ſ	3	27	2	pB. S. ſtellar.
1183	471		23	34 Piſcium	f	20	53	ſ	0	55	1	F. iF. lbM.
1188	472		27	18 Ceti	f	2	18	n	1	24	1	F. pS.
1189	473		—	47 ——	f	6	3	n	0	54	1	F. S. iF. er. ſome of the ſt. viſible.
1191	474		—	72 (ρ) ——	p	9	28	n	0	56	2	pB. pL. lE. lbM.
1193	475		—	83 (ε) ——	f	24	23	ſ	0	3	1	pF. pL. iF. bM.
1194	476		28	58 Aquarii	f	2	43	n	0	31	1	F. pL. iR. lbM.
1195	477		—	70 ——	p	2	28	ſ	0	27	1	pB. pL. iR. lbM.
1197	478		—	17 Ceti	p	10	10	n	0	53	1	pB. L. lE. lbM.
1198	479		—	— ——	p	5	13	n	1	35	1	pB. mE. mer. 2′ l.
1199	480		—	— ——	p	2	34	n	0	34	1	F. pL. lE. lbM.
1201	481		—	53 (χ) ——	p	0	24	n	0	23	1	pB. cL. R. 1′½ f. Sſt.
1202	482		—	55 (1ſt ζ) ——	f	17	54	n	0	15	1	Four. The p. 2, both F. E. S. within 1′ diſt. par.
1203	483											
1204	484		—	— — ——	f	17	56	n	0	11	1	The f. two, both pF. pS. E. about 2′ diſt. and nearly mer.
1205	485											
1206	486		—	— — ——	f	20	13	n	1	5	1	F. S. E.
1207	487		—	— — ——	f	37	18	ſ	0	7	1	F. cL. iF. lbM.
1209	488		—	— — ——	f	49	13	ſ	0	50	1	F. S. iF. bM.
1213	489		29	23 (2d θ) Arie	f	8	36	n	0	42	1	F. S. lE. contains 3 ſt. uncon.
1220	490	Dec.	7	66 (4 σ) Canc	f	8	10	n	0	54	1	pF. mE. r. 3′ l. 1′½ b.
1222	491		—	18 Leo. min.	p	13	13	ſ	0	30	1	pB. pL. iF. lbM.
1226	492		—	— — ——	f	1	47	n	0	0	1	pB. pL. lE. near. par.
1230	493		—	37 —— ——	f	13	7	n	0	49	1	F. S.
1231	494		—	46 Urſæ	p	3	47	ſ	0	36	1	pB. pL. iR.
1240	495		28	3 Leonis	f	3	34	n	0	16	1	F. pL. E. iF.
1241	496		—	9 (o) Virgin	f	11	52	ſ	1	5	1	F.
1245	497		—	31 (ſt d) ——	p	14	27	n	1	25	1	pF. vS.

Genl. No.	II.	1785	Stars.		M.	S.		D.	M.	Ob	Deſcription.
1247	498	Dec. 28	31 (1ſt d) Vir	p	12	30	n	1	3	1	F. pL.
1249	499	—	— — —	p	10	55	n	1	18	1	F.
1250	500	—	— — —	p	7	43	n	1	24	1	vL. er. ſome ſt. viſible.
1253	501	30	52 (τ) Ceti	f	4	36	n	1	1	1	F. S. R. vSpBN.
1255	502	—	76 (σ) —	f	29	37	n	0	30	1	F. eS. ſtellar. p. pBſt.
1256	503	—	— — —	f	31	37	f	0	15	1	pB. S. iF. mbM.
1257	504	—	20 Eridani	p	30	24	n	1	44	1	pB. S. lE. mbM.
1264	505	31	9 Hydræ	f	34	16	f	0	15	1	pB. S. lE. ſp nf. ſmbM.
1266	506	—	— —	f	49	32	f	0	37	1	pB. S. lE. lb ſfM.
1267	507	—	4 (ν) Crater	f	13	25	f	0	3	1	F. S. E.
1269	508	—	30 (η) —	f	4	26	f	0	41	1	pB. S. lE. bM.
1270	509	—	— — —	f	6	52	n	0	46	1	F. cL iR. lbM.
1272	510	—	53 Virginis	f	2	58	f	0	25	1	F. lE. 1′½ l.
1273	511	—	— —	f	3	21	f	0	12	2	pB. pL. R. bM.
1274	512	—	— —	f	3	55	f	0	12	2	F. S.
1275	513	—	— —	f	4	53	f	0	27	2	pB. pL. iF. mbM.
		1786									
1277	514	Jan. 1	49 Eridani	p	0	34	f	1	9	1	F. pL. E. ſp nf. 2′ l. 1′ b.
1278	515	—	— —	f	2	57	f	1	33	1	F. or pB. S. bM.
1279	516	—	— —	f	21	45	f	1	16	1	F. S. iR. lbM.
1289	517	—	29 (γ) Virgin	f	19	8	n	1	22	2	pB. pL. R. bM.
1290	518	2	13 Canum	p	44	34	n	2	49	2	Two. The p. F. S. E. The f. F. S. E. in a different direction.
1291	519				44	31		2	51		
1299	520	27	7 (η) Hydræ	f	24	25	n	0	7	2	F. S. lE. par. er.
1302	521	—	77 (σ) Leonis	p	3	42	f	1	28	3	F. vS. iF. ſmbM. er.
1304	522	30	47 Eridani	f	6	29	f	0	21	1	F. pS. iE. r. 1′ ſp. Sſt.
1305	523	—	— —	f	10	15	f	0	17	1	F. vS. iR. bM. almoſt ſtellar.
1309	524	Feb. 1	57 (μ) —	p	9	24	n	0	3	1	F. S. iF. lbM. p. 2 Sſt.
1311	525	—	— — —	p	4	5	n	1	27	1	F. pL. lE.
1312	526	—	— — —	f	0	16	n	0	51	1	F. cS. R. lbM.
1315	527	—	— — —	f	7	30	n	0	12	2	pB. S.
1316	528	—	— — —	f	7	40	n	0	12	1	F. S. lbM.
1323	529	—	28 (A) Hydr	p	26	37	n	0	8	1	F. S.
1324	530	2	60 (σ) Virg	p	52	32	n	0	19	1	F. S.
1326	531	—	— — —	p	47	19	f	1	12	2	pB. pL. E. b. f. M. 3′ l.
1330	532	—	— — —	p	35	12	f	1	28	2	F. pL. lbM.
1332	533	—	64 — —	f	26	8	f	1	17	2	F. pL. vlbM. 6 or 7′ l. 4′ b.
1334	534	—	— —	f	34	2	f	0	15	2	pB. vL. glbM.
1343	535	24	10 (r) —	f	43	43	f	0	39	1	F. mE. np ff. 2′ l. ¾ b.
1344	536	—	— — —	f	48	21	f	0	21	1	pB. mE. mbM. 2′½ l. 1′ b.
1345	537	—	92 —	p	46	53	n	0	43	1	F. pL. iR. er.
1346	538	—	108 —	p	1	8	n	0	59	1	pB. cL iR.
1348	539	—	110 —	p	2	58	f	0	11	1	pB. cL. lE. gbM.
1350	540	—	— —	f	1	11	f	0	53	1	pB. S. mbM.
1351	541	—	— —	f	2	31	f	0	28	1	F.

Genl. No.	II.	1786	Stars.		M.	S.		D.M.		Ob	Deſcription.
1352	542	Feb. 24	110 Virg	f	2	31	n	0	0	1	pB.
1355	543	—	— —	f	4	14	ſ	0	34	1	F.
1356	544	—	— —	f	4	52	n	0	27	2	pB. vS.
1357	545	—	— —	f	6	51	ſ	1	39	4	pB. S. iE. lbM.
1359	546	Mar. 3	6 (b) Leonis	p	6	16	n	1	42	1	Two. Both F. S. The place inaccurate in RA.
1360	547										
1362	548	—	14 Virginis	p	10	27	ſ	0	8	1	F. pL. mE. np ſf. but near. par.
1368	549	—	26 (χ) —	f	17	34	ſ	0	33	1	pB. vL. iF. lbM.
1370	550	4	14 (ι) Crate	p	4	13	n	0	35	2	Two. Both F. S. lbM. cBſt. between, but 1′½ ſ. of them.
1371	551				4	0		0	36		
1373	552	—	21 (θ) —	p	2	24	ſ	0	2	1	F. pS. iR. f. vSſt.
1374	553	—	— — —	f	11	21	ſ	1	9	2	pB. pL. iF. gbM. ſp. is Sſt.
1375	554	18	1 Cancri	f	4	36	ſ	0	4	2	pB. pL. er. vgmbM.
1380	555	19	26 Hydræ	f	7	26	n	0	21	2	pB. pL. iR. b. f. M.
1382	556	20	6 (3d b) Crat	p	76	10	ſ	1	11	3	pB. cL. iR. vgmbM.
1383	557	24	16 (ζ) Hydræ	f	3	21	n	0	22	1	F. mE. unequally B. 3′l. 1′b.
1388	558	25	21 (q) Virgin	f	10	43	ſ	0	38	1	F. E. mer. 3′l. f. cBſt.
1392	559	—	49 (g) —	p	14	43	n	1	33	1	F. S.
1396	560	—	— — —	p	13	0	n	0	31	1	pF. pS. iR.
1397	561	—	— — —	p	3	39	n	0	24	1	pB. pL. R. vgmbM.
1404	562	27	16 (κ) Crater	f	4	56	ſ	1	54	2	F. S. iR. bM. r.
1414	563	—	68 (i) Virgin	p	29	28	ſ	0	55	1	pB. iF. bM.
1417	564	28	19 Urſæ	p	3	1	n	0	23	1	pB. S. R. mbM.
1421	565	—	46 Leo. min.	p	5	3	n	0	28	1	pB. cL. iF. lbM.
1423	566	—	*1102 (e) Hy	f	35	28	n	0	53	1	F. pS. E. * See note.
1424	567	—	— — —	f	37	17	n	0	51	1	pB. pL. iF. gbM.
1425	568	Apr. 17	11 (s) Virgin	f	10	14	n	0	34	1	Four nebulæ. They are ſcattered about. The place is that of the laſt.
1426	569										
1427	570										
1428	571										
1429	572	—	— — —	f	11	34	ſ	0	26	1	A nebula.
1436	573	23	— — —	f	10	18	ſ	0	26	1	A nebula, cloudy.
1439	574	29	3 Serpentis	p	40	48	ſ	0	20	1	F. S. lE. r. p. 2 vcſt.
1440	575	—	— —	p	36	3	n	0	33	1	pB. cL. iR. mbM.
1441	576	—	— —	p	21	26	ſ	0	54	1	F. S. lE. like 2 ſtellar, joined cloſely.
1442	577	30	37 Virginis	p	11	22	n	0	4	1	F. S. making a triangle with 2 Bſt.
1444	578	—	— —	p	2	29	n	0	20	1	F. S.
1449	579	—	109 —	p	26	11	n	2	10	1	pB. cL. E.
1452	580	—	— — —	p	16	35	n	1	24	1	Two. The ſ. pB pL. R. gbM. The n. eF. cL. diſt. 9′. The place is of ſ.
1453	581										
1454	582	—	— — —	p	8	33	n	0	25	1	F. mE. r. 2′ l. ¼ b. f. ſt 6m. 16″ in time.
1461	583	May 3	14 (1ſt A) Ser	f	17	48	ſ	1	2	2	pB. S. E. nearly par. bM.
1463	584	26	5 (g) Ophiuc	f	27	48	n	1	8	1	pB. cL. gbM. er. undoubtedly ſt.
1468	585	27	3 Serpentis	p	5	43	ſ	1	52	1	F. S. iE. r.
1471	586	28	40 (ξ) Ophiuc	f	28	13	n	0	57	1	pB. S. iF.

587

Genl. No.	II.	1786	Stars.		M.	S.		D.M.		Ob	Description.
1472	587	June 3	61 Ophiuchi	f	0	23	n	0	36	1	F. cL. iF.
1480	588	Sept. 4	24 (ξ) Ariet	p	39	40	ſ	0	17	2	F. S. lE r. bM.
1481	589	—	— — ——	p	36	21	n	0	50	2	F. pL. E. b. f. M. 2' ſp. cBſt.
1483	590	18	2 Piſcium	f	2	2	n	0	48	1	F. S. bM.
1484	591	—	88 (γ) Pegaſi	p	4	29	n	0	38	1	F. pL. iF. unequally B.
1486	592	—	85 Ceti	p	3	19	n	0	5	1	pB. S. E. bM.
1490	593	20	54 Eridani	p	61	14	n	0	43	1	pB. pS. R. reſembling I. 107: but leſs.
1491	594	—	— ——	p	55	40	n	0	10	1	pB. vS. R. bM.
1502	595	23	66 Aquarii	p	41	2	ſ	0	1	2	F. cL. l and iE. nearly par. lbM.
1504	596	30	51 Ceti	f	10	14	n	0	51	1	F. S. bM. 1' ſ Sſt.
1507	597	—	32 Eridani	p	8	30	ſ	1	10	2	F. S. E. iF. in a row with ſome ſt.
1509	598	Oct. 13	59 (υ) Aqua	f	13	11	ſ	1	39	1	pB. pL. iR. vgmbM.
1513	599	17	77 Cygni	f	20	15	ſ	0	6	1	F. pS. E. er.
1514	600	—	10 Androme	f	2	5	ſ	1	14	2	pB. mE. np ſf. but near. mer. lbM. r. 5' l. 1'½ b. alſo ob. 1784.
1520	601	—	26 (β) Perſei	p	15	16	n	1	14	1	F. S. iF. r.
1521	602	—	— — ——	p	13	38	n	0	34	1	F. pS. iR. lbM.
1523	603	—	— — ——	f	11	27	n	0	35	1	pB. ſtellar. or pcſt. with S. vF. chev.
1528	604	18	59 Androme	p	2	10	ſ	0	17	1	pB. cL. lE. mbM.
1529	605	—	— ——	p	0	54	n	0	9	1	pB. S. iF.
1535	606	24	6 Lacertæ	p	17	44	n	2	18	3	F. S. er. or rather a patch of ſt.
1538	607	—	30 Perſei	p	12	50	ſ	1	44	1	F. cL. E.
1539	608	—	— ——	p	41	45	n	0	19	1	F. cL. er. ſome ſt. viſible.
1543	609	26	65 (ι) Piſcium	p	1	55	ſ	0	6	1	pB. S. iR. gbM.
1544	610	—	90 (υ) ——	f	24	26	n	1	31	1	F. S. bM. r.
1545	611	—	— — ——	f	27	38	n	0	41	1	F. S. lE.
1547	612	—	10 (α) Triang	p	28	30	ſ	1	8	1	pB. pL. lE. nearly par. mbM.
1549	613	—	— — ——	p	4	46	ſ	0	47	1	F. S. lE. par. bM.
1551 1552	614 615	—	34 (θ) Gemin	p	5	37	ſ	0	25	1	Two. The ſ. F. S. R. bM. The n. F. cS. R. bM.
1553	616	—	66 (α) ——	f	9	32	ſ	0	11	1	F. S. lbM.
1554	617	Nov. 13	6 (β) Arietis	p	3	55	n	0	56	1	F. cL. vglbM.
1555	618	—	— — ——	p	3	23	n	1	45	1	vS. ſtellar.
1556	619	—	52 ——	p	5	39	ſ	0	3	1	pB. cL. pmE. mer. r. 1' ſ. ſt.
1566	620	Dec. 11	27 (κ) Perſei	p	5	48	n	1	31	2	F. S. iR. bM. L. ſtellar.
1570	621	13	34 Ceti	p	23	45	ſ	0	34	~~1~~	F. E. np ſf. lbM. 1'½ l. ob. 2.
1573	622	20	26 ——	f	9	8	ſ	0	22	1	F. R. bM. er.
1582	623	21	2 (ε) Corvi	p	16	4	ſ	0	33	2	F. S. E. mer. or few deg. np ſf. lb. ſ. M.
1589	624	29	1 Sextantis	f	8	54	ſ	1	8	1	F. lE. nearly par. 1'½ l.
1590	625	—	29 (γ) Virgin	p	17	56	ſ	1	58	2	pB. mE. 20° ſp nf. 2' l.
1593	626	30	77 (σ) Leonis	p	4	44	ſ	1	30	1	pB. S. lE. mbM.
		1787									
1595	627	Jan. 11	55 (δ) Gemi	f	54	51	ſ	0	26	3	F. S. iF. lE. ſp nf.
1599	628	14	6 Comæ	f	6	36	n	0	38	1	pB. cL. E.
1601	629	—	— ——	f	13	46	ſ	0	49	1	F.

630

Genl. No.	II.	1787		Stars.		M.	S.		D.	M.	Ob	Deſcription.
1602	630	Jan.	14	6 Comæ	f	13	20	ſ	0	56	1	cL.
1603	631		—	— ——	f	16	3	ſ	1	31	1	F.
1605	632		—	29 ——	p	8	57	n	1	12	1	F. pL. R. vgbM.
1609	633		17	16 (1ſt p) Perſ	p	7	2	ſ	1	1	1	F. cL. lbM. 4′ dia.
1615	634	Feb.	13	33 (*n*) Cancri	p	12	7	n	0	34	1	F. S. bM.
1619	635		22	21 (θ) Crater	p	13	5	n	1	9	1	F. pS. iR. vgbM.
1621	636		—	65 Virgin	p	43	8	ſ	0	49	1	F. vL. bM.
1629	637	March	11	44 (k) ——	f	12	41	ſ	0	36	1	F. cL. iR. lbM. time inaccurate.
1630	638		15	*1439 (r) Ce	f	22	49	ſ	0	12	1	pB. S. lE. ſp nf. * See note.
1631	639		17	32 Leo. min.	p	16	31	ſ	0	11	1	pB. cS. r. } ob. 2
1632	640		—	— —— ——	p	16	11	ſ	0	18	1	F. vS. r. with 300 the ſame. }
1635	641		—	38 ——	f	2	41	ſ	0	36	2	F. vS.
1639	642		—	6 Canum	p	15	18	n	0	30	2	pB. S. E.
1642	643		—	10 ——	p	0	37	ſ	2	11	1	F. pL. gbM. r.
1644	644		—	— ——	f	2	55	ſ	1	1	1	pB. S. R. mbM. among ſcattered ſt.
1645	645		—	— ——	f	4	33	ſ	1	2	1	pB. S. R. mbM.
1647	646		—	17 ——	f	12	21	n	0	12	1	pB. L. iF. uneq. B. 3. or 4′ dia.
1653	647		—	12 (λ) Coronæ	f	33	4	n	1	27	1	F. S. iF.
1668	648		18	53 (2d.) Boot	p	55	31	n	1	11	2	pB. pL. lbM.
1669	649		—	— —— ——	p	54	11	ſ	0	13	2	F. S. E. nearly mer. r.
1671	650		—	— —— ——	p	16	19	n	1	13	3	pB. E. BNM. and F. br. 2′ l. ¼ b.
1672	651		—	— —— ——	p	5	42	n	0	51	2	pB. pL. iE. er.
1679	652		—	30 (g) Hercul	p	0	57	ſ	0	57	1	F. pL. r.
1684	653		19	70 Virginis	p	4	21	n	0	11	1	pB. vS. mbM. juſt p. pcſt.
1689	654		—	9 Serpentis	f	7	56	ſ	0	28	1	F. E. np ff. 1′½ l.
1690	655		—	— ——	f	15	44	n	0	16	1	F. E. mer. 1′½ l.
1691	656		—	— ——	f	16	59	ſ	1	17	1	pB. E. np ff. bM. 1′½ l.
1692	657		—	28 (β) ——	f	8	2	ſ	0	52	1	F. iF. bM. 1′¼ dia. between 2Bſt.
1694	658		20	~~44~~ Lyncis	p	47	39	ſ	0	23	1	pF. vS. mbM. 43 Lyncis
1699	659		—	13 Canum	p	18	44	n	1	47	1	F. S. R. juſt np. V. 42.
1710	660	April	9	8 ——	f	7	58	ſ	0	5	1	pB. pL. R. mbM.
1711	661		—	— ——	f	9	42	ſ	0	20	1	pB. vS. ſtellar. juſt p. Sſt.
1712	662		—	— ——	f	15	2	n	0	36	1	F. S. R. bM.
1713	663		—	19 ——	p	9	58	n	0	56	1	pB. vS. ſtellar. near and n. Sſt.
1716	664		—	— ——	p	3	47	n	3	13	2	pB. mE. ſp nf. near. mer. 5′ l. ¾ b.
1717	665		—	20 ——	f	2	52	n	2	31	1	pB. cS. E. with 300 ſt. with burrs.
1718	666		—	— ——	f	5	24	n	2	30	1	pB. S. iR. mbM.
1719	667		—	— ——	f	7	35	n	2	42	1	pB. vS. lE. bM.
1721	668		—	— ——	f	27	51	n	0	51	1	F. E. par. miniature of I. 170.
1723	669		—	— ——	f	33	20	n	0	41	1	pB. pL. vgmbM.
1724	670		—	— ——	f	35	10	n	2	37	1	pB. pL.
1725	671		—	— ——	f	37	51	n	0	35	1	pB. pL. E.
1727	672		—	— ——	f	43	59	n	0	17	1	pF. pS. bM.
1728	673		—	— ——	f	66	36	n	1	0	1	F. pL. E. vlbM.
1729	674		—	— ——	f	71	16	n	0	27	1	pB. E. nearly par. 1′½ l. ¼ b.

675

Genl. No.	II.	1787		Stars.		M.	S.		D.	M.	Ob	Deſcription.
1730	675	April	9	20 Canum	f.	80	7	n	0	51	1	F. vS.
1733	676		—	— —	f.	98	12	n	1	42	1	pB. vS. ſtellar.
1734	677		—	— —	f.	99	9	n	1	39	1	F. pS. lbM.
1736	678		—	— —	f.	117	42	n	1	1	1	F. S. r. in a row with 3 ſt.
1742	679		11	79 (ζ) Virgin	p	4	17	ſ	1	1	2	Two. The p. F. pS. iF.
1743	680					4	7	ſ	1	4		The f. pB. pL. iF. bM.
1744	681		—	1 Serpentis	p.	19	44	ſ	0	7	2	pB. pL. iF.
1746	682		—	— —	p.	16	35	ſ	0	4	2	pB. cS. lE.
1748	683		—	— —	f.	0	49	ſ	0	55	1	pB. pL. R. mbM. ſf. cſt.
1749	684		—	4 —	p	6	6	n	0	7	1	Two. The 2d pB. S. iE. for the 1ſt ſee II. 545.
1750	685		15	90 (ρ) Virgin	p.	2	37	ſ	0	44	2	F. pL. iR. f. and par. with 2Fſt.
1752	686		—	— — —	p	0	37	n	0	4	2	pB. S mbM.
1755	687		—	102 (1ſt υ) —	p	6	18	ſ	0	57	2	pB. cL. mE. 20° ſp nf.
1762	688	May	11	19 (λ) Bootis	p	30	37	n	0	7	2	F. mE. 15° ſp nf. lbM. 4′ l. ¾ b.
1766	689		12	— —	p	47	20	n	0	46	3	pB. pL. R. mbM.
1772	690		—	22 (τ) Herc	f	7	2	n	2	3	2	F. pL. iF. gbM.
1774	691		15	85 (η) Urſæ	f	15	34	ſ	0	12	1	pB. pL. E. nearly par. mbM.
1775 1776	692 693		—	— —	f	19	36	n	1	20	1	Two. The p. F. pS. R. vgbM. The f. F. vS. ſtellar. ſmbM. diſt. 2′½.
1778	694		—	24 (g) Bootis	p	6	31	n	0	43	1	pF. pS. lE. mbM.
1780	695		—	— —	f	1	7	ſ	0	12	1	pB. cL. iR. vgmbM.
1781	696		—	— — —	f	3	40	n	0	3	1	pB. S. E.
1787	697		16	*C Canu. 6m	f	16	23	ſ	0	39	1	F. E. par. bM. 1′½ l. 1′ b. *See note.
1789	698		—	— —	f	10	0	ſ	0	58	1	F. S. R. vſmbM.
1793	699		—	— —	f	13	19	n	0	20	3	F. pL. R. lbM. 1′½ dia.
1796	700		—	27 (γ) Bootis	f	5	15	n	0	9	1	pF. S. iE.
1800	701		—	25 Herculis	f	17	43	ſ	0	40	1	pB. pS. E. ſp nf. vgmbM.
1807	702	Sept.	11	68 (2d g) Aqu	f	4	23	ſ	1	1	1	pF. pL. E. np ſf. but near. par. mbM. 1′½ l.
~~—~~	~~703~~		—	~~*A Ceti 7m~~	~~f~~	~~4~~	~~47~~	~~n~~	~~1~~	~~7~~	~~1~~	~~F. cL. E.~~ * See note.
1809	704		16	47 Caſſiop	f	61	37	n	3	48	2	F. pL. mE. np ſf. mbM.
1819	705	Nov.	3	25 Cephei	f	21	6	ſ	1	35	1	pB. S. iR. er. almoſt equally B.
1822	706		—	1 (c) Caſſiop	f	6	26	n	2	5	2	pBM. 2cſt. involved in nebuloſity. 2′ l. 1′½ b. 56″
1839	707		30	19 (ξ) —	p	2	50	ſ	2	12	1	pB. vL. iR. vgmbM. r. 5 or 6 dia.
		1788										
1841	708	Jan.	14	27 Lyncis	f	8	50	ſ	1	15	1	pB. S. ſtellar. 36 Lyncis
1842	709		—	56 Urſæ	p	6	51	ſ	1	57	2	pB. S. lE. mer. bM.
1850	710		—	27 (γ) Bootis	p	43	42	n	1	51	1	F. S.
1851	711		—	— — —	p	42	47	n	1	50	1	pB. cL. iF.
1852	712		—	— — —	p	41	48	n	1	25	1	F. S. R. bM.
1854	713		—	— — —	p	39	13	n	2	12	2	pB. pL.
1855 1856	714 715		—	— — —	p	39	5	n	2	9	2	Two. Both pB. S. R. 2′ diſt. in the ſame mer.

Is 1570 or II. 621
by 2d obs 13 [illegible] 12′53″
n. 0° 49′

716

Genl No.	II.	1788		Stars.		M.	S.		D.	M.	Ob	Deſcription.
1858	716	Jan.	14	27 (γ) Bootis	p	36	48	n	2	19	2	pB. L. iR. FN. mbM. 4 or 5′ dia.
1859	717		15	15 Leo. min.	f	0	58	ſ	1	58	1	F. pL. iF. lbM.
1861	718		—	45 (ω) Urſæ	p	2	24	n	0	32	2	pB. S. lE. the np. corner of a S. trapezium.
1863	719	Feb.	3	32 Lyncis	p	20	34	ſ	0	16	1	F. pL. iR. bM.
1864	720		—	34 (μ) Urſæ	p	2	13	n	1	29	1	F. vS.
1865	721		—	— — —	p	1	57	n	1	26	1	F. vS. ſtellar.
1866	722		—	— — —	p	1	43	n	1	27	1	F. vS. ſtellar.
1869	723		—	13 Canum	p	73	0	ſ	0	22	1	pB. S. lE.
1870	724		—	— —	p	65	22	ſ	0	44	1	F. vS.
1871	725		—	— —	p	61	59	ſ	0	19	1	pB.E.ſp nf.but nearer mer.mbM.2′l
1874	726		5	80 (π) Gemi	f	22	56	n	0	38	1	pF. pL. iR. lbM. r. ſ. 2 ſt. par.
1875	727		—	59 (2 σ) Canc	p	13	13	n	1	47	1	pF. pL. iR. r.
1879	728		—	60 Urſæ	p	25	2	n	1	32	2	pB. pL. vgmbM.
1881	729		—	— —	p	20	38	ſ	1	4	2	F. cL. lE. par. lbM.
1882	730		—	— —	p	5	27	n	0	14	1	pB. bM. r. 4′ l. 3′ b.
1883	731		—	— —	p	0	54	n	1	5	2	pB. S. E. ſp nf.
1884	732		—	— —	f	0	47	ſ	0	19	1	F. S. almoſt. betw. 2ſp. ſt. chev. touches them.
1890	733		6	59 —	f	20	28	n	0	21	1	pB.mE.mer.pBSN.&vF.br.4′l.¾′b.
1894	734		9	20 Lyncis	p	14	20	n	0	28	1	F.pL.iF.mbM.ſf. a triangle of S.ſt.
1895	735		—	— —	p	12	44	ſ	1	37	1	F. ſtellar.
1896	736		—	— —	p	11	9	ſ	0	3	1	pF. vS. lbM. r.
1905	737		—	63 (χ) Urſæ	p	4	55	ſ	0	4	2	pF. pS. iR. lbM.
1906	738		—	— — —	f	2	30	n	0	57	1	pB. pL. R. mbM.
1907	739		—	— — —	f	2	50	n	0	56	1	F. vS.
1910	740		—	— — —	f	5	48	n	0	56	1	pF. pS. ſtellar.
1911	741		—	— — —	f	17	7	n	0	53	1	pF. S. R. gbM.
1920	742		—	3 Canum	p	1	50	ſ	1	35	2	F. S. E.
1922	743		—	— —	f	5	22	ſ	0	10	1	F. S.
1923	744		—	— —	f	21	50	n	1	27	2	pF. S. er.
1926	745	April	1	Neb. II. 728.	p	35	22	ſ	0	57	2	pF.pS.E.ſ.&lp.ſt.among ſt.not con.
1930	746		8	54 Virginis	p	0	24	ſ	0	43	1	pB. S. pBN.
1932	747		10	60 Urſæ	f	31	58	ſ	0	24	1	pB. E. 15 or 20° np ſf. 3′ l.
1933	748		—	— —	f	38	3	n	0	16	1	pB. pL. E. ſp. and in a line with 2ſt.
1936	749		—	— —	f	47	57	ſ	1	10	2	pB. pL. iF.
1943	750		27	19 (λ) Bootis	p	109	46	ſ	1	1	1	pF. pL. E. ſp nf.
1944	751		—	37 (ξ) —	f	16	12	n	0	25	2	Two. The p. cF. cS. The f. pF. pL. Both lE. np ſf. but nearer par.
1945	752					16	20		0	24		
1946	753		28	27 (β) Hercul	f	2	50	ſ	1	42	1	pF. pS. vlE. mbM.
1950	754		29	27 (γ) Bootis	p	11	15	n	1	27	1	pB. pL. R. FN.
1956	755	May	1	23 (θ) —	f	44	59	n	0	31	1	pB. pL lE.
1958	756		5	Neb. II. 757	p	11	47	ſ	3	7	2	pB. pL. iF. r.
1960	757		—	12 (ι) Draco	p	16	38	ſ	1	56	3	pB. S. iR. or lE. mbM.
1961	758		—	Neb. II. 757.	f	5	28	ſ	1	31	1	pF. pS. iR.

Gen.l No.	II.	1788		Stars.		M.	S.		D.M.		Ob	Deſcription.
1962	759	May	5	Neb. II. 757.	f	6	6	ſ	0	42	1	pB. FNM. 8 or 10′ l. 2′ b.
1963	760		—	— — —	f	6	29	ſ	1	37	1	pF. pS. R.
1964	761		—	— — —	f	24	8	ſ	0	33	1	pF. pS. iF.
1965	762		—	— — —	f	24	37	ſ	0	25	1	pF. pL. E.
1966	763		25	12 (ι) Draco	p	13	7	n	0	54	2	pB. mE. nearly mer. 2′ l. ½′ b.
1967	764		—	— — —	f	13	58	n	0	20	1	pB. S. iR. one p. ſuſpected vF. lE.
1968	765		—	— — —	f	14	36	ſ	0	58	1	pF. cS.
1969	766		—	— — —	f	15	0	n	0	18	1	pB. cL. iE. r.
1973	767	June	6	31 (1ſt ψ) —	p	31	23	n	0	15	1	pB. pL. R. vgmbM.
1995	768	Nov.	4	14 Camelop	p	42	52	n	1	57	1	pB. S. lE. BN. juſt ſ. pB. ſt.

Third claſs. Very faint nebulæ.

Gen.l No.	III.	1785		Stars.		M.	S.		D.M.		Ob	Deſcription.
1001	377	April	26	92 Leonis	f	3	6	ſ	1	24	2	Two. The n. F. S. lbM. The ſ. vF. vS. diſt. 5′ ſp. the place of n.
1002	378											
1003	379		—	1 Comæ	p	10	26	ſ	0	6	3	vF. vS. lE. er. or S. patch of ſt.
1004	380		—	— —	p	8	56	ſ	1	7	2	F. S.
1066	381		—	— —	p	7	56	ſ	1	12	1	vF. R.
1007	382		—	2 —	f	1	58	ſ	0	49	2	Three. The place is of the laſt or moſt n. which is vF. S. The other two are ſp. eF. vS.
1008	383											
1009	384											
1010	385		27	93 Leonis	p	2	54	ſ	0	35	1	vF. vS. r.
1011	386		—	— —	p	3	10	ſ	0	27	1	vF. vS. r.
1012	387		—	— —	p	2	10	ſ	0	27	1	vF. vS. r.
1013	388		—	— —	p	1	48	n	0	11	2	vF. pL. iR. lbM. r. 7′ nf. cBſt.
1014	389		—	— —	f	4	49	n	0	25	1	vF. vS.
1016	390		—	5 Comæ	p	8	56	ſ	1	47	1	Suſpected.
1017	391		—	— —	p	7	54	ſ	0	9	2	Six nebulæ. The places belong to the three firſt whieh are vF. vS. The other three are 10 or 12′ more ſouth, but there was not time to take their places. more ſuſpected.
1018	392				p	7	56	ſ	0	13	2	
1019	393				p	7	54	ſ	0	15	2	
1020	394											
1021	395											
1022	396											
1024	397		—	— —	f	3	36	n	0	5	2	vF. vL. iR. bM. 6′ l. 5′ b.
1027	398		—	26 —	f	8	12	ſ	1	33	1	vF. vS. r.
1030	399		28	61 Urſæ	f	31	26	n	1	57	2	vF. pL. lE. r.
1032	400	May	1	— —	f	25	34	n	2	38	4	vF. vS. ſtellar. 2′½ n. Sſt.
1039	401		—	14 Canum	f	2	36	ſ	0	36	1	vF. ſtellar, with 300 the ſame.
1043	402		—	— —	f	19	23	n	0	35	1	Two. Both vF. cS. The place is that of the p. The 2d, 3′ nf.
1044	403											
1045	404		—	— —	f	20	44	n	0	7	1	Two. Both vF. pS. The place is of the p. The 2d, 5 or 6′ nf.
1046	405											
1047	406		—	— —	f	25	14	ſ	0	59	1	vF. vS. lE.

Gen.e No.	III.	1785		Stars.		M.	S.		D.	M.	Ob	Deſcription.
1048 1049	407 408	May	1	49 (δ) Bootis	p	102 102	40 22	n	1 1	37 39	2	Two. Both vF. vS. A ſtar between them about half way.
1050	409		—	14 Canum	f	30	38	ſ	0	17	1	vF. pL. R. lbM.
1051	410		—	— —	f	35	6	n	1	1	1	vF. S. lE. er.
1054	411		—	— —	f	54	30	ſ	1	8	1	eF. vS.
1055	412		—	— —	f	54	45	n	0	25	1	vF. vS.
1058	413		—	— —	f	58	30	ſ	0	53	1	vF.
1059	414		—	51 (μ) Bootis	p	70	6	ſ	0	55	1	vF. mE.
1063	415		—	— — —	p	65	4	ſ	1	57	1	eF. pL.
1064 1065	416 417		—	— — —	p	64	2	ſ	1	57	1	Two. Both vF. S. diſt. 6 or 7′. The place is that of the ſf.
1066	418		—	— — —	p	62	~~52~~	ſ	0	6	1	eF. ſtellar. 40′
1068	419		—	— — —	p	61	4	ſ	0	42	1	vF. vS. E. er.
1069	420		—	— — —	p	54	54	ſ	0	50	1	vF. S.
1072	421		—	— — —	p	49	26	ſ	0	40	1	vF. vS.
1074 1075	422 423		2	49 (δ) —	p	86	2	n	0	~~24~~	1	Two. Both eF. ſtellar. diſt. 4 or 5′. nearly mer. The n. fainteſt. n 0° 36′
1077	424		3	— — —	p	147	32	n	0	11	1	vF. ſtellar. or little larger.
1078	425		—	— — —	p	101	48	n	1	39	1	vF. vS. in the field with III. 407, 408.
1087	426	Aug.	30	17 (ι) Piſcium	p	8	48	ſ	1	42	1	eF. pL. iR.
1088	427		—	19 —	f	0	14	n	0	19	1	vF. S, lE. nearly mer.
1091	428	Sept.	10	30 —	f	14	30	ſ	0	19	2	vF. S. iF. lbM.
1092	429		—	41 Ceti	p	26	42	n	0	35	1	vF. pS. E. — This a faint D. Neb of 1st Class JFWH
1093	430		—	— —	p	26	54	n	0	44	1	vF. vS.
1097	431		—	Neb. I. 100.	f	0	22	n	0	0	1	The 2d of two. eF. S. 5 or 6′ diſt. from I. 100.
1098	432		—	41 Ceti	f	15	36	n	0	22	1	eF.
1101	433		—	67 —	p	15	39	n	0	59	1	vF. vS.
1105	434		—	— —	f	18	40	ſ	0	42	1	vF. cL. iF. lbM. 4 or 5′ l. 2 or 3′ b.
1110	435		26	59 (*p*) Pegaſi	f	8	42	ſ	0	20	1	vF. vS.
1112	436		—	32 (2d *c*) Piſc	f	1	20	ſ	1	1	1	vF. pL. lbM.
1113	437		27	26 —	p	7	39	ſ	0	13	1	eF. vS. er. confirmed by 240.
1115	438		28	93 (2ψ) Aqua	f	9	22	ſ	0	15	1	eF. S. ſtellar. p. 1′½. pBſt.
1121	439	Oct.	1	20 Ceti	p	0	42	ſ	1	3	2	vF. S. iE.
1123	440		—	38 —	f	1	5	n	0	8	1	vF. vL. requires great attention.
1126	441		—	43 —	f	5	8	ſ	1	29	1	vF. vS. iE.
1127	442		—	— —	f	5	23	ſ	1	26	1	vF. vS. iE.
1136	443		5	17 Eridani	p	17	51	ſ	0	13	1	vF. vS. confirmed by 240.
1137	444		—	— —	p	9	23	n	0	25	1	eF. vS.
1138	445		—	— —	p	5	37	ſ	0	41	1	vF. pS. E.
1139	446		—	— —	f	3	4	ſ	0	3	1	vF. S. between ſome Sſt.
1144	447		—	20 (τ) Orion	f	10	23	n	1	32	2	vF. cL. iR. near a hook of vSſt.
1146	448		—	— — —	f	34	45	ſ	0	26	3	vF. S. R. r. lbM.
1147	449		6	1 (1ſt τ) Erid	f	4	8	n	1	34	1	vF. pL. broadly E. lbM.
1148	450		—	— — —	f	6	30	n	1	56	2	vF. S. lE.

Gen.l No.	III.	1785		Stars.		M.	S.		D.	M.	Ob	Deſcription.
1149	451	Oct.	6	20 Eridani	f	2	30	ſ	0	59	1	vF. S. R.
1154	452		8	52 (π) Aqua	p	30	46	n	1	39	1	vF. pL. R. r.
1160	453		—	10 Orionis	f	5	7	ſ	0	4	1	vF. vS. confirmed 240.
1161	454		9	60 Ceti	p	27	18	n	0	27	1	eF. pL. 240. left doubtful.
1162	455		—	82 (δ) —	f	4	11	n	1	2	2	vF. vL. lbM. er. 6 or 7′ dia.
1167	456		25	28 (ω) Piſcium	f	13	6	ſ	0	28	1	vF. pS. iF.
1168	457		—	78 (ν) Ceti	p	20	29	n	0	20	1	vF. cL. vlbM. m. p. Bſt. and joining.
1169	458		26	49 Aquarii	p	2	52	n	0	6	1	vF. S. er. time inaccurate.
1171	459		—	56 (1ſt ν) Ceti	p	7	44	ſ	1	17	1	vF. vS. er.
1172	460		—	—	p	2	55	ſ	1	16	1	vF. vS.
1174	461		27	18 (ι) Piſ. Au.	f	90	20	n	1	56	1	vF. cL. lE. glbM. 4 or 5′ l.
1177	462	Nov.	7	82 (δ) Ceti	f	8	1	ſ	0	36	1	vF. S.
1178	463		22	25 —	p	12	56	ſ	0	23	2	vF. pL. iR. r.
1179	464		—	67 —	p	20	11	n	0	59	1	eF. S. found in gaging.
1181	465		23	46 (ξ) Pegaſi	f	11	21	n	0	54	1	eF. S. iF. 240 the ſame.
1182	466		—	82 —	f	5	54	ſ	0	15	1	vF. S. R. lbM.
1186	467		27	18 Ceti	p	11	15	n	0	12	1	eF. vS. 240 left ſome doubt.
1190	468		—	72 (ρ) —	p	27	13	n	0	43	1	vF. E. nearly mer. lbM. 1′½ l. 1′ b.
1192	469		—	83 (τ) —	f	19	27	ſ	0	30	1	vF. ſtellar. 240 left ſome doubt.
1196	470		28	91 Aquarii	p	1	53	ſ	0	7	1	eF. vS. 240 left doubtful.
1200	471		—	53 (χ) Ceti	p	13	54	n	0	40	1	A few Sſt. mixed with nebuloſity.
1208	472		—	55 (1ſt ζ) —	f	41	48	ſ	0	18	1	vF. pL. vlbM. near ſcattered ſt.
1210	473		29	87 (u) Pegaſi	p	44	53	ſ	1	26	1	eF. cL. ſome doubt. p. a row of ſt.
1212	474		—	23 (2d θ) Arie	f	7	29	n	0	50	1	eF. vS. iR. confir. 240.
1214	475		—	34 (μ) —	p	1	44	ſ	0	44	1	vF. S. confir. 240.
1215	476	Dec.	5	34 (ζ) Andro	p	11	14	ſ	0	23	1	vF. vS. ſtellar. ſp. pBſt.
1216	477		—	36 —	p	2	25	n	0	44	1	vF. S. R. juſt p. vFſt.
1227	478		7	20 Leo. min.	f	1	20	n	0	47	1	eF. S. left doubtful.
1236	479		26	2 (ι) Can min	f	26	18	n	0	25	1	ſuſpected. eF. vS. lE.
1242	480		28	9 (o) Virgin	f	12	46	ſ	2	5	1	vF. L. ſeen by looking at II. 137.
1243	481		—	31 (1ſt d) —	p	17	49	n	1	44	1	vF.
1244	482		—	—	p	15	22	n	1	39	1	eF.
1246	483		—	—	p	12	49	n	1	24	1	vF.
1248	484		—	—	p	11	8	n	1	34	1	vF.
1252	485		30	46 Ceti	p	40	9	ſ	1	4	2	vF. S. iF. r.
1254	486		—	76 (σ) —	p	12	32	ſ	0	52	1	vF. vS. iF. better with 240.
1258	487		—	20 Eridani	p	3	52	n	2	14	1	vF. S. E.
1265	488		31	9 Hydræ	f	38	13	ſ	0	26	1	vF. cL gvlbM. 3′ l. 2′ b. p. pBſt.
1271	489		—	53 Virginis	p	18	36	ſ	0	47	1	vF. S. lbM.
		1786										
1276	490	Jan.	1	45 Eridani	p	11	41	ſ	0	42	1	vF. vS. lE. better with 240.
1285	491		—	13 (n) Virgin	p	16	10	n	0	35	2	vF. S. R. bM.
1286	492		—	15 (η) —	f	7	0	ſ	0	15	2	vF. cL. mE. r.
1287	493		—	29 (γ) —	p	6	35	n	1	12	2	eF. S. iF.
1288	494		—	—	f	1	24	n	0	48	2	vF. pS. E.

495

Genl. No.	III.	1786		Stars.		M.	S.		D.M.		Ob	Deſcription.
1293	495	Jan.	2	61 Urſæ	f	58	0	ſ	0	46	1	eF. S. iF. r.
1294	496		—	— —	f	70	52	ſ	0	3	1	eF. vS. pmE.
1300	497		27	36 Sextantis	f	6	47	n	1	20	2	cF. S. R. vlbM.
1301	498		—	58 (d) Leonis	f	0	43	n	0	1	1	vF. mE.
1303	499		30	39 (A) Erida	p	6	26	n	1	25	1	vF. S. E. er.
1306	500		—	69 (λ) —	p	3	50	ſ	0	24	1	cF. S. iF. bM.
1313	501	Feb.	1	57 (μ) —	f	4	13	n	0	30	1	vF. vS.
1314	502		—	— — —	f	6	2	n	0	39	1	vF. S.
1317	503		—	— — —	f	14	49	ſ	0	1	1	vF. pL. ſp. 2pBſt. equil. triang.
1329	504		2	60 (σ) Virg	p	38	27	n	0	34	2	vF. pS.
1331	505		—	64 —	f	16	1	ſ	0	39	2	vF. vS. R.
1333	506		—	— —	f	32	47	n	0	7	1	vF. E. 2′l.
1335	507		4	82 —	p	9	23	ſ	0	4	1	vF. vS. er. 240 rather confir.
1336	508		—	19 Libræ	p	18	52	ſ	0	27	1	vF. cL. iE. nearly mer.
1338	509		22	5 (β) Virgin	f	49	54	ſ	0	35	1	vF. vS.
1340	510		24	55 Orionis	f	1	13	n	0	7	1	eF. E. er. probably a patch of ſt. ″
1353	511		—	110 Virginis	f	3	~~5~~	ſ	0	25	1	vF. R. precedes I. 128. 7′½. and is 5′ n //
1358	512	March	3	17 (β) Cancri	p	14	9	n	0	9	1	vF. S. R. mbM. 240 ditto.
1361	513		—	6 (h) Leonis	f	2	1	n	0	25	1	eF. vS. ſtellar. 240 verif.
1364	514		—	26 (χ) Virgin	f	10	4	ſ	1	8	2	eF. S. mE.
1365	515		—	— — —	f	12	19	ſ	0	26	1	vF. S. E.
1366	516		—	— — —	f	14	18	ſ	0	41	1	vF. S.
1367	517		—	— — —	f	14	43	ſ	0	48	1	vF. S.
1381	518		19	41 (λ) Hydræ	p	0	28	ſ	0	5	1	vF. S. R. in the field with λ
1384	519		24	1 Sextantis	f	1	47	n	0	7	1	vF. pL. vgvlbM. betw. 2 groups of ſt. np. ſf.
1385	520		25	27 Hydræ	f	3	9	ſ	0	51	1	vF. S. E.
1386	521		—	— —	f	22	39	ſ	0	45	1	cF. pS. lE.
1387	522		—	14 (ι) Crater	p	34	1	ſ	2	2	2	cF. pL. iR. lb. near M.
1389	523		—	21 (q) Virgin	f	13	23	ſ	0	38	1	vF. E. ſp nf. 4′ l. 3′ b.
1390	524		—	— — —	f	15	14	ſ	1	59	2	cF. mE. r. 4′ l. ¾′ b.
1393	525		—	49 (g) —	p	14	19	n	1	14	1	vF. vS.
1395	526		—	— — —	p	13	15	n	0	8	1	eF. eS. ſome little doubt.
1398	527		27	8 Sextantis	p	10	33	ſ	0	31	3	vF. S. iR. vgbM.
1399	528		—	— —	p	9	10	ſ	1	32	1	vF. S. E. nearly mer.
1400	529		—	16 (κ) Crater	p	13	0	ſ	1	46	1	eF. S.
1401	530		—	— — —	p	3	32	ſ	1	30	1	vF. ſtellar.
1402	531		—	— — —	p	2	47	ſ	1	32	1	cF. ſtellar. vlbM.
1403	532		—	— — —	f	1	7	ſ	0	51	1	vF. lE. vlb. about M.
1405	533		—	24 (ι) —	f	28	31	ſ	0	59	1	vF. S. iF. time a little inacc.
1406	534		—	— — —	f	33	51	ſ	0	48	1	vF. pL. of uneq. light.
1407	535		—	— — —	f	40	50	n	0	58	2	vF. pS. iF.
1408	536		—	68 (ι) Virgin	p	36	17	ſ	0	33	1	cF. ſtellar.
1409	537		—	— — —	p	34	23	ſ	0	39	1	vF vS. iF.
1412	538		—	— — —	p	31	24	n	0	8	2	eF. S. er.

Gen.e No.	III.	1786	Stars.		M.	S.		D.M.		Ob	Deſcription.
1415	539	Mar. 27	68 (ι) Virgin	p	5	57	ſ	1	21	1	vF. vS.
1416	540	28	19 Urſæ	p	15	27	n	1	3	2	vF. S. E. 20° np ſf. contains 2vFſt.
1419	541	—	8 Leo. min.	f	9	41	n	0	50	3	cF. S. iR. gbM. r. 1′½ dia.
1420	542	—	21 — —	p	7	55	n	0	8	3	cF. vL. iF. 5′ l. 4′ b. ſp. a double ſt.
1431	543	April 17	11 (s) Virgin	f	37	39	ſ	1	31	1	eF. pL.
1433	544	—	— — —	f	43	12	ſ	1	23	1	vF. vS.
1435	545	—	— — —	f	62	44	ſ	1	9	1	eF. cS. er.
1437 1438	546 547	29	64 —	f	36	17	n	1	4	1	Two. Both vF. vS. r. the place betw. them. ſp nf. but near. mer.
1445	548	30	43 (δ) —	p	0	31	ſ	0	30	1	vF. cS. with 240 lE. near vSſt.
1447	549	—	84 (o) —	f	9	1	ſ	1	13	1	eF. vS. ſtellar. confir. 240.
1455	550	—	109 —	p	5	32	n	1	35	1	vF. S. p. and in a line with 2Bſt.
1458 1459	551 552	May 1	31 Bootis	p	23	9	ſ	0	42	1	Two. Both eF. vS. The place is that of the f. diſt. 3 or 4′
1462	553	3	50 (σ) Serpen	p	12	7	ſ	0	15	1	cF. iF. r. 5′ l. 3′ b.
1467	554	27	3 —	p	21	20	ſ	1	19	1	vF. S. E. np ſf. but nearly mer.
1473	555	June 22	101 Hercul	p	2	55	ſ	1	28	1	cF. S. lE. iF. r.
1479	556	Sept. 4	71 (ε) Piſcium	f	22	10	n	1	24	1	vF. mE. 75° ſp nf. 1′½ l.
1485	557	18	85 Ceti	p	6	18	n	0	52	1	vF. vS. lE. r. 240 the ſame.
1487	558	20	97 Aquarii	p	14	9	ſ	0	33	1	eF. cL. iR. 5 or 6′ dia.
1489	559	—	54 Eridani	p	65	18	ſ	0	59	1	3vSſt. in a line with vF. nebuloſity.
1492	560	21	45 Androm	f	16	14	ſ	0	32	1	vF. S. E. among ſt.
1493	561	—	58 —	p	17	32	ſ	1	34	1	vF. ſtellar.
1494 1495 1496 1497	562 563 564 565	—	— —	p	15	22	ſ	1	48	1	Four. ſtellar. unequal. Three in a row, and the fourth making a a rectangle with them. That at the angle is much larger.
1499	566	—	— —	p	5	4	n	0	14	2	vF. pL. iR.
1500	567	—	— —	f	2	29	ſ	0	12	1	vF. S. lE.
1505	568	30	17 Eridani	p	8	17	n	2	17	1	eF. S. iF. among 3 or 4 ſt.
1506	569	—	— —	f	9	13	n	0	27	1	eF. lE. er.
1516	570	Oct. 17	26 (β) Perſei	p	43	39	n	0	51	1	eF. vS. lE.
1517	571	—	— — —	p	42	9	n	0	44	1	eF. ſtellar. not verified.
1518 1519	572 573	—	— — —	p	32	26	ſ	0	11	1	Two. Both vF. vS. er. diſt. 4′. the place between them.
1524 1525	574 575	—	— — —	f	13	6	n	0	27	1	Two. Both vF. ſtellar. vlbM. but the ſ. is the brighteſt and largeſt.
1526	576	18	12 Androm	p	24	27	ſ	1	47	1	vF. S. iR. ſtellar.
1527	577	—	53 (τ) —	p	18	55	ſ	0	8	1	vF. pL. lE. lbM.
1531	578	—	28 (ω) Perſei	p	2	50	ſ	1	16	1	vF. vS.
1536	579	24	17 (ι) Andro	p	3	21	n	1	3	1	vF. vS. juſt f. pBſt.
1537	580	—	30 Perſei	p	29	43	ſ	1	3	1	ſuſpected. r. ſome ſt. viſible.
1541	581	25	40 Arietis	p	8	24	ſ	0	18	1	vF. E. iF. time inaccurate.
1542	582	—	— —	p	1	17	ſ	2	7	1	vF. S. iF.
1548	583	26	10 (α) Triang	p	18	21	ſ	0	29	1	vF. vS. E. or 3Fſt. with vF. Nebul.

584

Gen.l No.	III.	1786		Stars.		M.	S.		D.	M.	Ob	Deſcription.
1550	584	Oct.	26	35 Arietis	p	0	41	n	0	50	1	vF. S. bM.
1558	585	Nov.	26	48 (ν) Eridani	p	3	33	ſ	1	2	1	ſuſpected; hazy weather.
1559	586		—	— — —	p	3	6	ſ	0	56	2	eF. S. E. nearly par. another ſuſpec. 3′ ſf. ſtellar.
1561	587		28	42 (ξ) —	f	2	34	n	0	9	1	vF. S. bM. betw. 2 ſt.
1562	588		—	— — —	f	7	35	ſ	1	57	1	vF. S.
1563	589		—	— — —	f	10	16	ſ	1	22	1	vF. cL. iE. nearly par. bM.
1571	590	Dec.	14	8 Leporis	f	9	18	ſ	0	6	1	eF. ſtellar. a little doubtful.
1572	591		15	13 (ζ) Eridani	p	4	35	ſ	0	6	1	eF. ſtellar: about 1′ nf. II. 286.
1574	592		20	Neb. II. 447	p	0	6	ſ	0	2	1	Two. The p. vF. vS. The next
1575	593					0	0		0	5		eF. eS. and left doubtful.
1576	594		—	26 Ceti	f	18	21	ſ	0	23	1	vF. mE. bM. 3′½ l. 1′½ b.
1578	595		21	29 —	p	28	42	n	1	17	1	vF. S. ſome ſt. in it.
1579	596		—	44 Hydræ	p	34	21	n	0	50	2	vF. S. lbM. ſf. a trapezium of S. ſt.
1584	597		24	— —	p	59	13	n	2	44	1	vF. S. R. vglbM.
1592	598		30	59 (c) Leonis	f	2	40	ſ	1	19	1	eF. S. lE. not verified.
		1787										
1596	599	Jan.	11	55 (δ) Gemini	f	68	4	ſ	0	12	1	eF. pL. r.
1597	600		14	30 (η) Leonis	p	11	47	ſ	0	20	1	vF. S. iR.
1598	601		—	— — —	p	11	4	n	0	3	1	vF. cS. lE. er.
1604	602		—	29 Comæ	p	12	7	n	0	6	1	vF. cL. vgbM. r. cBſt.
1606	603		—	— —	p	6	16	n	0	11	1	vF. E. np ſf. 2′½ l.
1608	604		17	58 Androm	f	2	45	ſ	0	21	1	vF. ſtellar. confir. 240.
1613	605	Feb.	10	9 (1ſt μ) Canc	p	3	15	n	0	46	1	vF. S. iF.
1614	606		13	10 (2d μ) —	f	11	31	ſ	1	1	2	vF. S. ſtellar.
1616	607		—	33 (η) —	p	12	~~35~~	n	0	38	1	vF. vS. 23″
1617	608		22	69 (ν) —	f	2	5	n	0	33	1	eF. S. R. vlbM.
1620	609		—	21 (θ) Crater	f	2	28	n	0	28	1	vF. vS. R. with 240 gbM.
1622	610		—	65 Virginis	p	33	51	ſ	0	12	1	cF. pL. E.
1623	611		—	— —	p	32	29	n	0	50	1	vF. S. no time to verify. —— Do not believe it [illegible])
1625	612	March	11	87 (e) Leonis	f	23	23	ſ	0	57	1	vF. cS. E.
1626	613		—	44 (k) Virgin	p	1	42	n	0	8	1	vF. E. er.
1627	614		—	— — —	f	0	57	ſ	0	49	1	cF. S. iR.
1634	615		17	38 Leo. min.	p	1	27	ſ	0	27	2	cF. S. er.
1636	616		—	6 Canum	p	34	40	ſ	1	1	2	vF. cL. iF. 4′ dia. 5′ ſ. ſt. 6 m.
1637	617		—	— —	p	27	3	ſ	1	13	2	eF. pL. iR. 1′ dia. or more.
1643	618		—	12 —	p	3	8	ſ	1	31	1	eF. vS.
1646	619		—	17 —	f	11	29	n	0	2	1	vF. S. E. nearly mer.
1648	620		—	— —	f	26	36	ſ	0	14	1	cF. E. nearly par. r. ¾′ l.
1649	621		—	— —	f	38	29	ſ	0	46	1	vF. S. iR. conf. 300.
1650	622		—	12 (λ) Coronæ	f	7	17	ſ	0	37	1	vF. S. R. diſcov. in gaging.
1651	623		—	— — —	f	24	7	ſ	0	19	1	vF. vS. n. 2 ſt. 300 confir.
1652	624		—	— — —	f	27	24	ſ	0	9	1	vF. S. bM. diſcov. with 300
1654	625		18	10 (n) Urſæ	p	2	41	ſ	2	27	1	vF. vS. 300.
1655	626		—	— — —	f	7	14	ſ	0	4	2	vF. S. iF. lbM. r.

Genl. No.	III.	1787	Stars.		M.	S.		D.	M.	Ob	Deſcription.	
1657	627	March 18	43 Lyncis	p	17	50	ſ	1	2	2	vF. vS. ſtellar. 300.	42 Lyncis
1658	628	—	— —	p	16	48	ſ	0	9	1	cF. cS.	
1659 1660	629 630	—	— —	p	15	24	ſ	0	8	1	Two. Both vF. vS. diſt. 3′. nearly mer. 300.	
1663	631	—	34 (μ) Urſæ	f	3	39	ſ	1	55	2	vF. S. R. 300.	
1664	632	—	47 —	p	2	8	n	0	32	2	cF. vS. lE. mer. gmbM.	
1666	633	—	20 Canum	f	1	58	ſ	0	13	1	vF. S. lbM.	
1673	634	—	54 (φ) Bootis	p	1	24	ſ	0	36	1	vF. vS. conſ. 300 ſp. 2 vBſt.	
1674 1675	635 636	—	— — —	f	6	42	n	0	46	1	Two. The nſ. vF. vS. verif. 300. The ſp. diſcov. with 300 eF. S. iF.	
1676	637	—	30 (g) Hercul	p	24	18	ſ	1	5	1	vF. eS. 300. ſhewed 2 vSſt. with nebu.	
1677	638	—	— — —	p	3	33	ſ	0	59	1	vF. vS.	
1678	639	—	— — —	p	2	53	ſ	1	24	1	eF. eS.	
1680	640	—	— — —	f	0	54	ſ	1	5	1	vF. vS.	
1681	641	—	— — —	f	1	10	ſ	1	16	1	vF. vS.	
1685	642	19	70 Virginis	f	1	37	ſ	0	26	1	vF. S. iF. time l. inaccurate.	
1686	643	—	— —	f	3	43	n	0	5	1	vF. S. lE. juſt ſſ. ſt.	
1687	644	—	5 (υ) Bootis	f	25	41	ſ	0	44	1	vF. vS. E. confir. 300.	
1688	645	—	30 (ζ) —	p	10	16	n	0	17	1	eF. vS. lbM. betw. 2 vFſt. 300.	
1693	646	—	28 (β) Serpen	f	11	15	n	0	24	1	vF. S. lE.	
1695	647	20	44 Lyncis	p	33	11	ſ	2	16	1	vF. vS. verif. 300.	43 Lyncis
1698	648	—	13 Canum	p	36	41	n	0	46	1	vF. E. par. 1′ l.	
1703	649	—	— —	f	12	29	n	1	0	1	vF. S. lE.	
1704	650	—	— —	f	19	54	n	2	18	1	eF. vS.	
1705	651	—	— —	f	27	11	n	1	11	1	vF. S.	
1706	652	—	— —	f	29	47	n	0	17	1	eF. vS.	
1707	653	—	— —	f	62	59	n	1	34	1	vF. pS. E. mer. 300.	
1714	654	April 9	19 —	p	7	36	n	0	51	1	vF. vS. lbM.	
1715	655	—	— —	p	*	26	n	2	57	1	vF. pS. lbM. *forgot, but is 5, 6, or 7′.	
1720	656	—	20 —	f	15	21	n	1	15	1	vF. vS. lbM.	
1731 1732	657 658	—	— —	f	83	33	n	1	57	1	Two. Both vF. vS. E. in differ. directions. 2 or 3′ diſt. par. each ſ. Sſt.	
1735	659	—	— —	f	117	16	n	0	18	1	vF. vS. r.	
1737	660	—	— —	f	119	18	n	1	16	1	eF. cS.	
1738	661	—	— —	f	125	25	n	0	44	1	eF. S.	
1739	662	11	29 (γ) Virgin	f	2	8	n	0	54	1	vF. pL.	
1740	663	—	— — —	f	3	33	n	0	55	1	vF. S. iF.	
1741	664	—	— — —	f	6	6	ſ	0	14	1	vF. S.	
1751	665	15	90 (p) —	p	1	48	n	0	23	2	cF. cL. R. vlbM. r. 5′ dia.	
1753	666	—	102 (1ſt υ) —	p	19	18	ſ	0	55	1	eF. vS.	
1754	667	—	— — —	p	18	53	ſ	0	33	2	eF. vS. verif. 300. 2d obſ. vF. S.	
1757	668	—	105 (φ) —	p	3	29	ſ	0	58	1	cF. S. r.	
1758	669	May 7	61 —	p	5	42	n	1	30	1	vF.	
1759	670	—	— —	p	2	45	n	1	46	1	vF.	
1760	671	—	8 Libræ	p	9	38	ſ	1	28	1	cF. S. R. ſp and joining 2 Sſt.	

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Gen^{l} N^{o}.	III.	1787	Stars.		M.	S.		D.M.		Ob	Deſcription.
1764	672	May 12	19 (λ) Bootis	p	48	58	n	0	41	3	cF. vS. ſtellar. 300.
1767	673	—	— — —	p	38	30	n	2	21	1	cF. S. R. or lE.
1769	674	—	— — —	p	5	52	n	2	31	1	cF. cS. iR.
1771	675	—	38 (2d *b*) —	p	11	18	n	0	35	1	vF. pS. iF. ſp. 2 S. unequal ſt.
1777	676	15	24 (*g*) —	p	16	34	n	0	35	2	cF. cS. lE nearly par.
1779	677	—	— — —	p	2	56	ſ	1	15	1	vF. pS. lE.
1783	678	—	*A Bootis 7m	f	0	3	n	0	3	1	Two. The p. vF. vS. The f.
1784	679				0	48		0	1		eF. eS. * See note.
1785	680	—	42 Herculis	p	13	17	n	1	0	2	vF. S. R. lbM. er. near ſome Sſt.
1786	681	16	*C Can^{m} 6m.	f	0	44	ſ	0	15	1	cF. vS. lE. * See note.
1788	682	—	— — —	f	7	35	ſ	0	7	1	eF. cS. E. ſp. Sſt.
1792	683	—	— — —	f	12	35	ſ	0	25	1	cF. pL. iF.
1794	684	—	— — —	f	13	49	n	0	34	1	vF. vS. R.
1795	685	—	27 (γ) Bootis	p	19	48	n	1	6	2	vF. cS. R. ſbM.
1797	686	—	— — —	f	8	42	n	0	18	1	eF. cS. lbM.
1798	687	—	— — —	f	13	27	n	0	23	1	cF. pS. another ſuſpec. 2′ n. 300.
1799	688	—	16 (τ) Coronæ	f	7	34	ſ	0	48	1	vF. cS. iR.
1801	689	—	67 (π) Hercu	p	20	32	ſ	0	11	1	eF. cL. iE. nearly par.
1802	690	19	10 Libræ	p	4	6	ſ	0	43	1	vF. cS. iF. lbM.
1803	691	—	— —	f	6	51	ſ	0	59	1	cF. ſmbM. ſtellar.
1805	692	Aug. 12	33 (ι) Aquarii	p	5	23	n	0	38	1	eF. E. np ſf. 2′l. 1′b.
1806	693	Sept. 11	41 —	p	11	30	n	0	36	1	eF. vS. 360 confirmed it.
1811	694	Oct. 11	50 (*f*) Caſſio	f	90	22	n	0	30	1	vF. vS iR. bM.
1829	695	Nov. 3	10 Camelop	p	155	0	n	0	53	1	eF. pL. iF.
1833	696	5	17 (ξ) Cephei	p	16	35	ſ	0	47	2	vF. S. R. lbM. r. 1′ dia.
		1788									
1847	697	Jan. 14	67 Urſæ	f	11	9	n	0	40	3	vF. E. np ſf. 5′l. 1′b.
1853	698	—	27 (γ) Bootis	p	39	53	n	1	29	2	vF. S.
1857	699	—	— — —	p	38	20	n	2	8	2	vF. S. iF.
1867	700	Feb. 3	45 (ω) Urſæ	p	14	53	ſ	1	33	1	cF. L. iE. mb. ſ. M. 4′l. 2′$\frac{1}{2}$ b.
1868	701	—	— — —	p	6	6	ſ	0	1	1	vF. vS. iF.
1872	702	—	13 Canum	p	42	13	ſ	0	55	1	vF. vS.
1873	703	5	71 (ο) Gemin.	p	10	3	ſ	0	46	1	vF. vS, perhaps a patch of ſt.
1877	704	—	60 Urſæ	p	81	11	ſ	0	22	1	eF. vS. perhaps a patch of Sſt.
1878	705	—	— —	p	39	57	ſ	0	43	1	vF.
1880	706	—	— —	p	23	49	n	0	38	2	vF. vS. lE. ſ. cBſt.
1887	707	—	63 (χ) —	f	11	2	n	0	34	2	vF. vS. another ſuſp. ſf. eF. eS.
1892	708	6	59 —	f	30	14	ſ	0	31	1	vF. vS. in a line with 2 ſt. nf ſp.
1897	709	March 9	21 Lyncis	f	34	50	n	1	41	1	vF. R. vgbM. 2′$\frac{1}{2}$ dia.
1898	710	—	9 (ι) Urſæ	p	45	51	n	0	49	1	vF. iF. 2′$\frac{1}{2}$ l. 1′$\frac{3}{4}$ b.
1899	711	—	— — —	p	41	10	n	1	49	1	eF. E. ſp nf. 3′$\frac{1}{2}$ l. 2′$\frac{1}{2}$ b.
1901	712	—	— — —	p	4	49	n	1	6	1	eF. cS. r. p. ſome Fſt.
1903	713	—	— — —	f	25	7	n	1	15	1	cF. cS. lE.
1904	714	—	— — —	f	24	58	n	1	11	1	cF. cS. lE.
1908	715	—	63 (χ) —	f	3	26	n	0	39	1	eF. pS.

Gen.l No.	III.	1787		Stars.		M.	S.		D.	M.	Ob	Deſcription.
1909	716	March	9	63 (χ) Urſæ	f	5	2	n	2	26	1	vF. vS.
1913	717		—	3 Canum	p	14	1	n	0	37	1	cF. mE. nearly mer. 5′ l.
1916	718		—	— —	p	4	6	ſ	0	51	1	vF. vS.
1918 1919	719 720		—	— —	p	2	47	ſ	1	31	1	Two. Both vF. vS. diſt. 1′ in the ſame meridian.
1924	721		—	— —	f	32	1	ſ	1	21	1	vF. S.
1925	722		11	49 (*g*) Virgin	p	18	9	ſ	0	21	1	eF. S.
1927	723	April	1	Neb. II. 728.	p	0	25	ſ	0	2	1	eF. vS.
1931	724		8	61 Virginis	f	1	43	ſ	2	23	1	cF. vS. iF.
1934	725		10	60 Urſæ	f	39	40	ſ	1	14	2	eF. cL. iR. lbM. 3′ dia.
1935	726		—	— —	f	42	45	ſ	0	34	2	vF. pS. R.
1938	727		12	35 (σ) Hercul	f	16	11	n	0	14	1	cF. S. E. par.
1940	728		13	42 —	f	20	46	n	0	54	1	vF. cS. iR.
1941	729		27	19 (λ) Bootis	p	113	28	ſ	0	3	1	vF. S.
1947	730		28	27 (β) Hercul	f	4	6	n	0	2	1	eF. vS. E.
1948	731		29	27 (γ) Bootis	p	15	47	n	1	16	1	vF. vS.
1949	732		—	— —	p	15	33	n	1	22	1	vF. vS. lE.
1951	733		—	— —	p	9	25	n	2	4	1	vF. vS.
1952	734		—	— —	p	8	52	n	2	8	1	cF. pS.
1953	735		—	22 (τ) Hercul	f	30	17	ſ	1	2	1	eF. pS. with 300 iF.
1954	736		30	21 (1ſt ι) Libr	f	7	7	n	1	59	1	vF. pL. E. mer. lbM. 300.
1957	737	May	1	23 (θ) Bootis	f	49	59	ſ	1	46	1	vF. vS. ſtellar.
1970	738		25	12 (ι) Draco	f	17	8	n	0	44	1	vF. vS.
1971	739	June	2	14 (η) —	p	32	~~30~~	n	0	57	1	vF. R. vgbM. er. 3′ dia. 47″
1972	740		3	15 (A) —	p	10	14	ſ	3	21	1	cF. pL. iE.
1974	741		6	31 (1ſt ψ) —	p	5	13	ſ	0	5	1	eF. ſtellar. with 300 lE. par.
1975	742	July	8	*B Draco 7m.	f	4	25	ſ	0	27	1	vF. ſtellar. verif. 300. * See note.
1977	743		30	19 Aquilæ	f	9	24	n	0	26	1	cF. iR. r. 3 or 4′ dia. is rather a PN
1979	744	Aug.	2	51 —	p	8	8	n	0	29	1	vF. pL. R. vgmbM.
1989	745	Nov.	1	27 (δ) Cephei	f	26	10	ſ	1	24	1	vF. pL. iF. er.
1993	746		—	36 Camelop.	f	64	5	ſ	0	38	1	vF. S. R. lbM.
2060	747	Dec.	3	*22 Cam Hev	p	37	1	ſ	0	8	1	cF. pL. iF. mbM. er. ſome ſt. viſible. * See note.

Fourth claſs. Planetary nebulæ.

Stars with burs, with milky chevelure, with ſhort rays, remarkable ſhapes, &c.

Gen.l No.	IV.	1785		Stars.		M.	S.		D.	M.	Ob	Deſcription.
1037	30	May	1	14 Canum	p	6	48		0	55	2	Two ſt. diſt. 3′ connected with a vF. narrow nebuloſity.
ſ 1128	31	Oct.	3	50 Aquarii	f	7	55	ſ	0	37	1	F. S. ſtellar. with pL. chev.
1143	32		5	62 (*b*) Eridani	f	0	35	n	0	21	2	vB. vS. mbM. like a ſt. affected with irregular burs.
1145	33		—	49 (*d*) Orion	p	2	33	n	0	28	4	A ſt. with m. chev. or vBN. with m. nebuloſity.

Gen.e No.	IV.	1785	Stars.		M.	S.		D.	M.	Ob	Deſcription.
1237	34	Dec. 28	40(2dφ) Orio	f	5	41	ſ	0	12	2	cB. S. nearly R. like a ſt. with L. dia. with 240 like an ill defined planetary neb.
1263	35	31	9 Hydræ	p	8	19	ſ	0	14	1	A S ſt. with a bruſh ſp. FS. it reſembles fig. 7. Phil. Tranſ. Vol. LXXIV. Tab 17.
1281	36	1786 Jan. 1	60 Orionis	p	11	38	ſ	0	20	3	A ſt. affected with vF. extenſive m. chev. The ſt. not quite central.
1337	37	Feb. 15	28 (ω) Draco	f	20	33	ſ	2	12	1	A planetary neb. vB. has a diſk of about 35″ dia. but very ill defined edge. With long attention a vB. well defined R. center becomes viſible.
1341	38	24	55 Orionis	f	18	3	n	1	17	2	A cſt. affected with vF. m. chev.
1378	39	March 19	2 Navis	p	3	32	ſ	0	5	1	pB. R. r. within the 46th of the *Connoiſſ. des Temps* almoſt of an equal light throughout 2′ dia. no connection with the cluſter, which is free from nebuloſity.
1413	40	27	68 (ι) Virgin	p	30	45	ſ	0	18	1	A pBſt. with a ſeeming bruſh to it np. may be a vS neb. cloſe to it.
1464	41	May 26	14 Sagittarii	p	11	58	ſ	1	15	1	A double ſt. with extenſive nebuloſity of different intenſity. About the double ſt. is a black opening reſembling the neb. in Orion in miniature.
1503	42	Sept. 30	51 Ceti	f	7	26	n	0	27	1	A ſt. about 8 or 9 m. with vF. branmer each branch 1′ l.
1522	43	Oct. 17	26 (β) Perſei	p	2	48	n	1	54	2	A pBſt. with 2 F. branches.
1564	44	Nov. 28	5 Monocero	p	7	16	ſ	0	2	1	A ſt. involved in m. chev.
1612	45	1787 Jan. 17	55 (δ) Gemin	f	9	6	ſ	1	1	2	A ſt. 9 m. with a pB. m. nebuloſity. equally diſperſed all around. A very remarkable phænomenon.
1624	46	Feb. 22	99 (ι) Virgin	p	4	38	n	0	57	1	pB. almoſt cB. vS. ſtellar. like a ſtar with burs.
1628	47	March 11	44 (k) ——	f	1	48	ſ	0	46	1	pB. ſtellar. reſembles a ſt. with a bur all around.
1661	48	18	19 Leo. min	f	6	32	ſ	0	17	1	A vFſt affected with vF. nebuloſity. E. ſp nf. 1′ l. 300.
1756	49	April 15	102 (1ſt υ) Vir	p	6	9	ſ	0	52	2	pB. ſtellar. like a ſt. with a S. bur all around.
1773	50	May 12	77 (κ) Hercul	p	40	13	ſ	0	28	1	vB. R. 4′ dia. almoſt equally B. with a F. r. margin.

The D * is Triple Clusters
1 & II. I suppose this
is the same with
V. 10. 11. 12

Gen.l No.	IV.	1787	Stars.		M.	S.		D.M.		Ob	Deſcription.
1804	51	Aug. 8	61 (g) Sagitt	p	13	56	n	1	23	2	A cB. S. beautiful planetary nebula; but c. hazy on the edges, of a uniform light; 10 or 15″ dia. perfectly R. I ſhewed it to M. DE LA LANDE.
1823	52	Nov. 3	4 (d) Caſſio	p	4	0	ſ	1	6	2	A ſt. 9 m. with vF. nebuloſity of S. extent about it.
1831	53	—	10 Camelop	[illegible]	55	42	n	0	11	2	A pB. planetary nebula. near 1′ dia. R. of uniform light and pretty well defined. 2 obſ. with 360 magnified in proportion; but ſtill pretty abruptly defined, and a little elliptical.
1845	54	1788 Jan. 14	67 Urſæ	f	7	32	ſ	0	30	1	cB. S. N. with F. chev.
1888	55	Feb. 6	34 Lyncis	p	28	4	n	0	2	2	pB. R. almoſt of an even light throughout, approaching to planetary, but ill defined and a little fainter on the edges ¾ or 1′ dia. p. 1′ pc ſt.
1891	56	—	59 Urſæ	f	25	11	n	0	56	1	cB. iR. cBNM. with extenſive chev. 5′ dia.
1939	57	1787 June 11	35 (σ) Hercul	f	34	27	ſ	0	18	2	AvS.F.ſt involved in eF.nebuloſity. verifed Apl 12 1788
1997	58	Nov. 25	24 Cephei	f	116	28	n	0	2	1	A ſt. 9 m. ſurrounded with vF. m. nebuloſity. The ſt. is either double, or not R. Leſs than 1′ dia.

Fifth claſs. Very large nebulæ.

Gen.l No.	V.	1785	Stars.		M.	S.		D.M.		Ob	Deſcription.
1187	25	Nov. 27	18 Ceti	f	1	30	n	1	2	1	Four or five pL. ſt. forming a trapezium of about 5′ dia. The incloſed ſpace is filled up with faintly terminated m. nebuloſity. The ſt. ſeem to have no connexion with the nebuloſity.
1224	26	Dec. 7	18 Leo. min.	p	8	7	n	1	1	2	cB. mE. par. 8′l. 3′b.
1235	27	26	15 Monocero	p	0	12	ſ	0	6	2	Some pBſt 7 or 8′ ſp. 15th Monoc. are involved in eF. m. nebuloſity which loſes itſelf imperceptibly.
1280	28	1786 Jan. 1	48 (σ) Orion	f	2	46	n	0	44	2	Remarkable m. nebuloſity, divided in 3 or 4 large patches, including a dark ſpace; cannot

Gen. No	V.	1786	Stars.		M.	S.		D.	M.	Ob	Deſcription.
											take up leſs than ½ degree, but I ſuppoſe it to be much more extenſive.
1292	29	2	61 Urſæ	f	45	38	ſ	0	40	1	eF. vL. vlbM. r. 10′ l. 8 or 9′ b.
1296	30	18	42 45 } c Orioni	p	0	0	n	0	0	2	The 1ſt and 2d c Orionis, and the ſtars about them, are involved in eF. unequally B. m. nebuloſity.
1308	31	31	44 (ι) ——	p	0	0	n	0	0	2	ι Orionis with its neighbouring ſt. are involved in eF. m. nebuloſity to a great extent.
1318	32	Feb. 1	28 (η) ——	p	17	26	ſ	1	4	2	cB. vL. m. diffuſed and vaniſhing. near and ſf. Bſt.
1319	33	——	—— ——	f	1	26	ſ	0	7	1	Diffuſed eF. m. nebuloſity. The means of verifying this phænomenon are difficult.
1320	34	—	46 (ε) Orionis	p	0	0	n	0	0	1	I am pretty certain ε Orionis is involved in unequally diffuſed m. nebuloſity.
1321	35	—	36 (υ) —— 56 ——	f p	3 2	39 16	ſ n	0 0	40 28	4	Diffuſed m. nebuloſity, extending over no leſs than 10 degrees of PD. and many degrees of RA. It is of very different brightneſs, and in general extremely F. and difficult to be perceived. Moſt probably the nebuloſities of the 28th, 30, 31, 33, 34, and 38th of this claſs are connected together, and form an immenſe ſtratum of far diſtant ſtars, to which muſt alſo belong the nebula in Orion.
1515	36	Oct. 17	35 (ν) Andro	p	9	8	ſ	0	20	2	vF. vL. E. nearly mer. or a little from np ſf. about 20′ l.
1534	37	24	57 Cygni	f	5	1	ſ	1	1	1	vL. diffuſed nebuloſity. bM. 7 or 8′ l. 6′ b. and loſing itſelf vg. and imperceptibly.
1577	38	Dec. 20	19 (β) Orion	f	11 11	9 35	n ſ	1 0	19 52	1	Strongly ſuſpected nebuloſity of v. great extent. Not leſs than 2° 11′ of PD. and 26″ of RA. in time.
1580	39	21	11 (β) Crater	p	8	15	ſ	0	17	2	vF. mE. nearly par. or about 10° ſp nf. vgbM. 8′ l. 3′ b.

Gen.l No.	V.	1786	Stars.		M.	S.		D.	M.	Ob	Deſcription.
1581	40	Dec. 21	11 (β) Crater	p	7	49	f	0	26	2	vF. mE. 15° ſp nf. vlbM. about 7′l. 4′b.
1640	41	1787 March 17	6 Canum	p	8	27	f	1	12	1	vB. E. 60° ſp nf. 20′l. 2′b.
1700	42	20	13 ——	p	18	39	n	1	48	1	vB. mE. ſp nf. but nearly par. mbM. 16′l.
1921	43	1788 March 9	3 ——	p	0	38	f	1	41	3	v brilliant. BN. with Fm. bran. np ſf. 15′l. and to the ſf. running into vF. nebuloſity extending a great way. the N. is not R.
1994	44	Nov. 1	36 Camelop	f	84	33	n	0	23	2	cB. R. vgbM. BN. 6 or 7′ dia. with a F. branch extending a great way to the np. ſide; not leſs than ½ degree. and to the n. or nf. the nebuloſity diffuſed over a ſpace not leſs than a whole degree.

Sixth claſs. Very compreſſed and rich cluſters of ſtars.

Additional abbreviations.	Cl. Cluſter.	com. compreſſed.
	ſc. ſcattered.	co. coarſely.

Gen.l No.	VI	1785	Stars.		M.	S.		D.	M.	Ob	Deſcription.
1175	20	Oct. 27	18 (ε) Piſ. Auſt	f	133	24	n	0	23	2	cB. iR. 8 or 9′ dia. a great many of the ſt. viſible, ſo that there can remain no doubt but that it is a Cl. of vS. ſtars.
1219	21	Dec. 7	25 Gemino	f	2	15	f	1	15	1	A v. rich and v. com. Cl. ſt. of about 5′ dia. ſome of the largeſt ſt. are in a row.
1322	22	1786 Feb. 1	31 Monocero	p	30	4	n	1	20	4	A beautiful Cl. of much com. ſt. conſid. rich. 10 or 12′ dia. C. H. diſcovered it in 1783.
1477	23	June 27	46 (υ) Sagitt	p	49	15	f	0	42	1	A beautiful Cl. of vS. ſt. of various ſizes. 15′ dia. very rich.
1512	24	Oct. 17	58 (ν) Cygni	f	15	56	n	1	18	2	A v. com. and v. rich Cl. of eSſt. about 6′ l. 4′ b. nearly par.
1567	25	Dec. 11	27 (κ) Perſei	f	5	55	n	2	25	2	A beautiful com. and rich Cl. of S. and L. ſt. 7 or 8′ dia. the L. ſt. arranged in lines like interwoven letters.

Genl. No.	VI.	1786	Stars.		M.	S.		D.M.		Ob	Deſcription.
1568	26	Dec. 11	53 (*d*) Perſei	f	13	34	ſ	1	13	1	A vF. and v. com. Cl. of eS. ſt. near 4′ dia.
1587	27	27	22 Monocero	p	20	9	n	0	51	1	A v. beautiful Cl. of much com. S. and L. ſt. above 20′ dia.
1594	28	1787 Jan. 11	75 (*l*) Orionis	f	21	25	n	1	2	1	A Cl. of e. com. and eS. ſt. c. rich iF. the f. and moſt com. part R.
1814	29	Oct. 14	3 Lacertæ	p	7	52	n	2	7	1	A com. Cl. of eS. ſt.
1817	30	18	7 (ϱ) Caſſiop	f	3	10	ſ	0	46	3	A beautiful Cl. of v. com. Sſt. v. rich. C. H. diſcovered it 1783.
1828	31	Nov. 3	37 (δ) ——	f	19	48	n	1	2	1	A beautiful Cl. of pL. ſt. near 15′ dia. conſ. rich.
1981	32	1788 Sept. 21	80 (1ſt π) Cyg	p	11	26	n	0	28	1	A beautiful Cl. of p. com. ſt. 8 or 9′ dia. nearly R. c. rich.
1990	33	Nov. 1	7 (χ) Perſei	f	1	7	ſ	0	22	1	A v. beautiful and brilliant Cl. of L. ſt. v. rich. the M. contains a vacancy.
1991	34	——	— — ——	f	4	0	ſ	0	23	1	A v. beautiful, brilliant Cl. of L. ſt. iR. v. rich. near ½ degree in dia.
1998	35	26	15 (κ) Caſſiop	p	1	22	ſ	1	26	1	A S. Cl. of vF. and e. com. ſt. about 1′ dia. The next ſtep to an er. neb.

Seventh claſs. Pretty much compreſſed cluſters of large or ſmall ſtars.

Genl. No.	VII.	1785	Stars.		M.	S.		D.M.		Ob	Deſcription.
1080	18	July 17	12 Vulpeculæ	p	7	56	n	0	44	1	An E. Cl. of i. ſc. ſt. of various ſizes. c. rich.
1081	19	30	21 Aquilæ	p	5	49	n	1	55	1	A p. com. Cl. of p. ſc. ſt. of var. ſizes, magnitudes, and colours. iF. and unequally com. 12 or 15′ dia.
1176	20	Nov. 1	7 Monocero	f	1	3	n	0	35	3	A beautiful Cl. of p. com. and equally ſc. ſt. 10 or 12′ dia.
1234	21	Dec. 26	109 (*n*) Tauri	p	14	59	n	1	37	1	A Cl. of p. com. ſt. with many eS. ſt. mixed with them.
1238	22	28	13 Monocero	f	2	48	n	0	21	1	A S. Cl. of p. com. vS. ſt.
1259	23	30	31 (η) Canis	f	32	6	ſ	0	39	1	A com. Cl. of pL. ſt. c. rich.
1282	24	1786 Jan. 1	60 Orionis	p	5	9	ſ	0	9	2	A Cl. of p. com. pS. ſc. ſt. with many eS. ſuſpec. betw. them 7 or 8′ dia.
1297	25	27	8 Monocero	p	11	46	n	0	49	1	A Cl. of p. com. ſt. of ſeveral ſizes 4 or 5′ dia. with extenſively ſtraggling ones.

Genl. No.	VII.	1786	Stars.		M.	S.		D.M.		Ob	Deſcription.
1307	26	Jan. 30	6 Monocero	f	8	59	n	1	7	1	A Cl. of eS and pm. com. ſt. with a few L. but not rich. in the ſhape of a hook.
1342	27	Feb. 24	11 ———	f	42	13	ſ	1	21	2	An i. Cl. of eS. ſt. c. com. 9 or 10′ l. 4 or 5′ b. with an extending bran. towards ſp. C. H. diſcov. 1783.
1377	28	Mar. 19	2 Navis	p	8	23	n	0	47	1	A Cl. of pS. ſt. p. rich. 15′ dia.
1456	29	April 30	5 (ρ) Scorpii	p	7	14	n	0	38	1	A Cl. of vS. ſt. p. rich 6′ l. 4′ b. in the form of a parallelogram.
1465	30	May 26	14 Sagittarii	p	1	35	n	0	9	1	A Cl. of pS. ſc. ſt. above 15′ dia.
1466	31	— —	———	f	1	29	ſ	0	25	1	A Cl. of vS. and p. com. ſt. c. rich. 2 or 3′ dia.
1498	32	Sept. 21	58 Androm	p	10	49	ſ	0	8	4	A vL. co. ſc. Cl. of vL. ſt. iR v. rich. takes up ½ degree like a nebulous ſt. to the naked eye.
1532	33	Oct. 18	11 (μ) Aurig	f	6	32	n	0	54	1	A Cl. of p. com. pS. Sſt. c. rich. contains 1 L. the reſt are all of a ſize.
1569	34	Dec. 11	13 (α) ———	f	9	7	n	0	32	1	A Cl. of vF. and vSſt. p. com. but not rich. iF. 3′ dia.
1583	35	24	70 (ξ) Orionis	f	15	53	ſ	1	29	1	A Cl. of S. pm. com. ſt. with ſuſpected m. nebuloſity.
1585	36	26	18 Monocero	p	3	48	n	1	0	1	A Cl. of v. ſc. ſt. c. rich. and of great extent.
1586	37	27	77 Orionis	f	12	24	n	0	55	1	A Cl. of v. com. eSſt. c. rich. 3 or 4′ dia. moſt com. M.
1588	38	—	22 Monocero	p	7	39	n	1	31	2	A beautiful Cl. of vSſt. of ſeveral ſizes. c. com. and rich M. 10 or 12′ dia.
		1787									
1611	39	Jan. 17	21 (σ) Aurigæ	f	3	25	ſ	2	6	1	A p com. Cl. of Sſt. 4′ dia.
1813	40	Oct. 14	3 Lacertæ	p	38	31	n	1	35	1	A Cl. of Sſt. of ſeveral ſizes. 3 or 4′ dia. p. rich. like a forming one.
1815	41	— —	———	f	5	8	n	0	2	2	A S Cl. of ſt. p. com. e. rich in vS. ſt. The com. part 4 or 5′ dia.
1818	42	18	24 (η) Caſſio	f	29	41	n	0	26	2	A brilliant Cl. of L. and vS. ſt. c. rich.
1820	43	Nov. 3	1 (e) ———	p	11	41	n	1	25	1	A S. Cl. of vSſt. c. com. and p. rich.
1821	44	———	— ———	f	4	34	n	1	8	2	A Cl. of p com. pLſt. c. rich. The ſt. arranged chiefly in lines from ſp. nf.
1825	45	—	37 (δ) ———	p	9	29	ſ	1	28	2	A S. p. com. Cl. of ſt. not rich. iF. like a forming one.
1826	46	— —	— ———	f	17	23	n	1	44	2	A S. Cl. of pL. ſt. c. rich.
1832	47	—	10 Camelop	p	55	40	n	1	37	2	A Cl. of ſt p. rich and c. com. lE. 3 or 4′ dia. iF.

Gen.ˡ Nº	VII.	1787	Stars.		M.	S.		D.	M.	Ob	Deſcription.
1835	48	Nov. 9	32 Caſſiop	f	17	1	ſ	1	40	1	A com. Cl. of ſome pL. and many vS. ſt. iR. 6 or 7′ dia.
1836	49	—	45 (ι) ——	p	11	8	n	0	20	1	A Cl. of ſome cL. ſt. and many eS. ſo as hardly to be ſeen. The Lſt. arranged in circular order 3 or 4′ dia.
		1788									
1984	50	Sept. 27	81 (2d π) Cyg	p	22	13	ſ	1	14	1	A few Sſt. with ſuſpected nebuloſity. with 300 many vS. ſt. intermixed with the former, ſo as to make a Cl.
1985	51	Oct. 19	71 (g) ——	p	5	49	ſ	0	9	1	A p. com. Cl. of pS. ſt. c. rich iR. 5 or 6′ dia.
1986	52	——	— ——	p	0	42	n	0	34	1	An extenſive Cl. of Lſt. c. rich above 20′ dia.
1987	53	—	73 (ρ) ——	f	30	41	n	0	48	2	A L. Cl. of p. com. cLſt. above 15′ dia. c. rich.
1992	54	Nov. 1	36 Camelop	f	29	1	n	0	16	1	A vF. patch. or S. Cl. of eSſt.
1996	55	23	32 (ι) Cephei	f	57	34	n	1	47	3	A Cl. of cS. ſt. iF. p. rich and com. contains a vacancy M.

Eighth claſs. Coarſely ſcattered cluſters of ſtars.

Gen.ˡ Nº	VIII.	1785	Stars.		M.	S.		D.	M.	Ob	Deſcription.	
1217	41	Dec. 7	98 (k) Tauri	f	12	11	ſ	0	54	1	A co. Cl. of ſt. or projecting point of the m. way.	
1218	42	—	125 ——	p	1	22	ſ	0	4	2	A Cl. of co. ſc. ſt. above 15′ dia. The ſt. nearly of a ſize and equally ſc.	
1233	43	26	109 (n) ——	p	15	30	n	1	29	1	A Cl. of v. co. ſc. Lſt. join. to VII. 21.	
1239	44	28	~~5 (η)~~ Can. min	f	0	38	ſ	1	54	1	A Cl. of v. co. ſc. Lſt. form a croſs. not rich.	4(γ)
1260	45	31	6 Navis	p	32	48	ſ	0	1	1	A co. ſc. Cl. of ſt. not rich.	
1261	46	——	——	p	10	18	n	0	49	1	A vL. but co. ſc. Cl. of ſt.	
1262	47	——	——	p	10	27	n	0	39	1	A Cl. of ſc. ſt. or the m. way crouded with ſt. of equal ſize and colour.	
		1786										
1283	48	Jan. 1	78 Orionis	f	10	59	ſ	1	9	1	A Cl. of v. ſc. ſt. of various ſizes. above ½ degree of extent.	
1295	49	3	*B Gemi. 6m	p	33	23	n	0	35	1	A Cl. of co. ſc. Lſt not rich. *See note	
1298	50	27	8 Monocero	f	10	58	n	0	49	2	A Cl. of ſt. arranged in a broad row. 25′ l. 6 or 8′ b. not v. com. but p. rich.	
1339	51	Feb. 23	11 ——	f	25	25	ſ	0	1	1	A Cl. of v. ſc. ſt.	
1376	52	Mar. 19	2 Navis	p	12	16	n	1	32	1	A Cl. of vL co. ſc. ſt. not rich.	
1474	53	June 27	46 (υ) Sagitta	p	82	10	ſ	1	4	1	A Cl. of ſc. Sſt. 8′ dia. not v. rich.	

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Gen.l No.	VIII	1786	Stars.		M.	S.		D.	M.	Ob	Deſcription.
1475	54	June 27	46 (ν) Sagitt.	p	71	19	ſ	0	25	1	A co. ſc. Cl. of cLſt. The place is that of a S. triangle.
1476	55	—	— —	p	64	17	ſ	0	23	1	A co. ſc. Cl. of Lſt.
1510	56	Oct. 17	37 (γ) Cygn	f	0	53	n	0	32	1	A S. Cl. of co. ſc. ſt. of various ſizes. E. like a forming one.
1511	57	—	58 (ν) ———	f	8	47	n	0	20	1	A Cl. of co. ſc. pS. ſt. of ſeveral ſizes. not rich.
1533	58	24	57 ———	f	3	19	n	0	16	2	A Cl. of pL. ſc. ſt. not v. rich.
1540	59	—	59 Perſei	f	7	59	n	0	21	1	A Cl. of co. ſc. pL. ſt. not v. rich.
1560	60	Nov. 26	19 Monocero	p	5	3	ſ	0	23	1	A Cl of pL. ſc. ſt. not v. rich. may be a projecting point of the m. way.
		1787									
1610	61	Jan. 17	21 (σ) Aurigæ	p	16	38	ſ	0	30	1	A Cl. of co. ſc. Lſt. iF. not rich. like a forming one.
1810	62	Sept. 19	35 (γ) Cephei	p	4	43	ſ	4	50	2	A Cl. of co. ſc. Lſt. not rich. but the ſt. are brilliant. one 7 m.
1816	63	Oct. 16	21 (ζ) ———	f	1	21	ſ	0	56	1	A S. Cl. of pL. ſt.
1824	64	Nov. 3	27 (γ) Caſſiop	f	11	12	n	0	53	2	A forming cluſter of p. com. ſt. C. H. diſc. 1783.
1827	65	—	37 (δ) ———	f	17	56	n	0	29	2	A S. Cl. of Sſt. not v. rich. C.H. 1783.
1830	66	—	45 (ε) ———	f	47	9	ſ	1	58	2	A Cl. of co. ſc. cLſt. 8 or 10′ dia. one 7. m. near M.
1834	67	9	17 (ξ) Cephei	p	10	0	ſ	2	0	1	A Cl. of co. ſc. L. and S. ſt. 7 dia. like a forming one.
1838	68	12	41 Aurigæ	p	8	57	n	1	9	1	A S. Cl. of ſc. ſt. not rich one. 7 m. towards the n. but this does not ſeem connected with the Cl.
1840	69	Dec. 3	18 Androm	p	8	59	ſ	1	20	1	A Cl. of co. ſc. pL. ſt. one 8 m. in the ſf. part.
		1788									
1862	70	Feb. 3	41 (υ) Perſei	f	46	17	n	1	28	1	A Cl. of co. ſc. Lſt. p. rich above 20′ dia.
1893	71	March 4	58 Aurigæ	p	1	22	ſ	0	44	1	A Cl. of co. ſc. pL. ſt. p. rich the place is that of a double ſt. of the 3d claſs.
1976	72	July 30	62 Serpentis	p	27	~~26~~	n	0	6	3	A Cl. of co. ſc. Lſt. C. H. 1783. 56″
1978	73	—	59 (ξ) Aquilæ	p	4	2	ſ	0	34	1	A Cl. of co. ſc. ſt. with one pBſt. M.
1980	74	Sept. 21	80 (1st π) Cyg	p	34	12	ſ	0	12	1	A Cl. of co. ſc. Lſt. not rich 6′ dia.
1982	75	26	3 Lacertæ	p	7	29	ſ	2	21	2	A Cl. of co. ſc. Lſt. lE. ſp nf. 16′l.
1983	76	27	59 (1st f) Cyg	p	4	1	ſ	0	7	1	A ſt. 6 m. ſurrounded by many cſt. forming a brilliant ſc. Cl. the Lſt. not M. but f.
1988	77	1	27 (δ) Cephei	f	17	23	ſ	0	22	2	A Cl. of co. ſc. ſt. 8′ dia. C.H. 1787.
1999	78	26	15 (κ) Caſſio	f	10	56	ſ	1	8	2	A Cl. of v. co. ſc. Lſt. take up 15 or 20′. C. H. diſc. 1784.

Notes to ſome nebulæ and cluſters of ſtars.

I. 138. The number refers to De la Caille's ſouthern catalogue in the Cœlum Auſtrale Stelliferum.

I. 190. A ſtar of the ſixth magnitude, not contained in any catalogue. I have called it C Canum Venaticorum. It follows Fl. 17. Can. Ven. 37′ 34″ in time, and is 0° 2′ more ſouth than that ſtar.

II. 566. See the note to I. 138.

638. See the note to I. 138.

697. See the note to I. 190.

703. A ſtar of the 7th magnitude, not contained in any catalogue. I called it A Ceti. Not having ſettled its place, I can only give it in a coarſe way. RA. about 0 h. 31′ 37″, PD. about 94° 22′.

Since found to be 17 of Mayers Zodiacal Cat. for 3d. obs. See II. 661

III. 678. A ſtar of the 7th magnitude, not contained in any catalogue. I have called it A Bootis. It follows Fl. 39 Bootis 6′ 56″ in time, and is 0° 55′ more north.

681. See the note to I. 190.

742. A ſtar of the 7th magnitude, not contained in any catalogue. I have called it B Draconis. Its place very coarſely is RA. 18 h. 47′. PD. 41°¾.

747. See Mr. Wollaston's general catalogue. Zone 20°.

VIII. 49. A ſtar of the 6th magnitude, not contained in any catalogue. I have called it B Geminorum. Not having ſettled its place, I can only give it in a coarſe way, RA. about 6 h. 52′ 4″. PD. about 55° 17′.

P. S. The planet Saturn has a *ſixth ſatellite* revolving round it in about 32 hours, 48 minutes. Its orbit lies exactly in the plane of the Ring, and within that of the firſt ſatellite. An account of its diſcovery with the forty-feet reflector, and a more accurate determination of its revolution and diſtance from the planet will be preſented to the Royal Society at their next Meetings.

WILLIAM HERSCHEL.

Account of the Diſcovery of a Sixth and Seventh Satellite of the Planet Saturn; with Remarks on the Conſtruction of its Ring, its Atmoſphere, its Rotation on an Axis, and its Spheroidical Figure. By William Herſchel, LL.D. F.R.S.

From the PHILOSOPHICAL TRANSACTIONS.

Read at the ROYAL SOCIETY, November 12, 1789.

IN a ſhort Poſtſcript, added to my late *Paper on Nebulæ*, I announced the diſcovery of a *ſixth ſatellite* of Saturn, and mentioned, that I intended to communicate the particulars of its orbit and ſituation to the Members of the Royal Society, at their next meeting. I have now the honour to preſent them, at the ſame time, with an account of two ſatellites inſtead of one; and have called them the *ſixth* and *ſeventh*, though their